



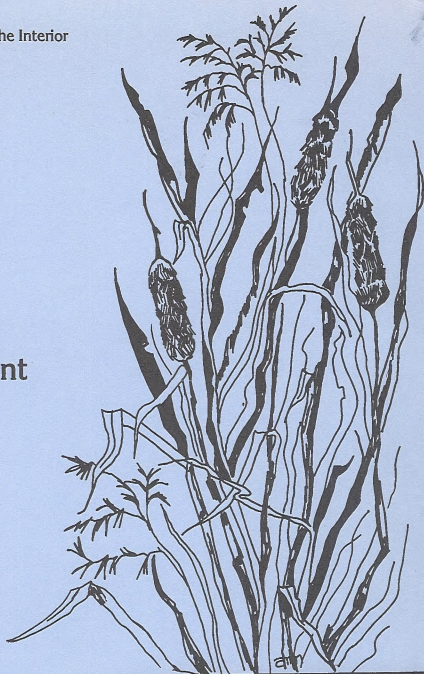
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of the Interior

Montana — March 1981

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Environmental Impact Statement APPENDICES



Prairie Potholes EIS

Vegetation Allocation

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APPENDICES

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APPENDIX 1.1: AGENCY'S RESPONSIBILITIES IN THE PRAIRIE POTHOLES EIS AREA

The following agencies share regulatory or reviewing responsibility in the Prairie Potholes EIS Area with BLM.

National Advisory Council on Historic Preservation (NACHP), Heritage Conservation and Recreation Service (HCRS), Montana State Historic Preservation Officer (SHPO) and Montana State Archaeologist

Section 106 of the National Historic Preservation Act and Section 2b of Executive Order 11593 require that BLM consult with NACHP, HCRS, SHPO, and the State Archaeologist on actions that might affect historic or cultural values on public lands.

Bureau of Indian Affairs (BIA)

The Blackfeet, Rocky Boy, Fort Belknap, and Fort Peck Indian Reservations in the Prairie Potholes are administered by the BIA (U.S. Department of the Interior).

Soil Conservation Service (SCS)

The SCS (U.S. Department of Agriculture) is primarily concerned with the stabilization of the soil and watershed resources and increasing the productivity of private land. To improve production on private land, the SCS has developed farm and ranch plan programs with such soil conservation projects as detention reservoirs and seeding. In ranch plan development, grazing systems are designed to use the private range effectively. In an integrated program, other rangelands such as public land must be considered. If the private ranch plan development should incorporate other uses on public land, conflicts would arise, particularly if use of public lands would be adjusted. SCS assistance on private lands is accomplished primarily through five soil and water conservation districts in or near the EIS area.

Through the Agricultural Stabilization and Conservation Service (ASCS), the Soil Conservation Service provides assistance to landowners who want to improve their private rangelands. The ASCS provides cost-sharing on fences, water developments, and erosion control; the SCS provides technical support in planning, surveying, designing, and laying out each project.

Corps of Engineers

This agency (U.S. Army) has permitting responsibility under Section 404 of the Navigable Water Act.

U.S. Geological Survey (USGS)

USGS (U.S. Department of the Interior) has jurisdiction over operational development of oil and gas deposits on public lands after BLM issues the lease.

Cooperative State Grazing Districts

Organized under the 1933 Montana Grass Conservation Act, these nonprofit cooperative associations of livestock operators are empowered to lease or buy grazing lands, to develop and manage district controlled lands and to allocate grazing preferences among members and nonmembers. BLM has cooperative agreement with these 11 State Grazing Districts in the Prairie Potholes:

HAVER RESOURCE AREA	PHILLIPS RESOURCE AREA	VALLEY RESOURCE AREA
North Fork	North Phillips	Willow Creek
Cherry Ridge	South Phillips	Bucky Creek
Lohman		North Valley
Coal Creek		Beland
Mayne Creek		

Environmental Protection Agency (EPA)

EPA is authorized under Section 309 of the Clean Air Act to review and evaluate environmental impact statements. Under Section 308, Federal Water Pollution Control Act, this agency also monitors water pollution control planning through the Montana Department of Health and Environmental Sciences with which BLM coordinates land use planning.

Fish and Wildlife

The Fish and Wildlife (U.S. Department of the Interior) manages Creedan Coulees, Thibodeau Lake, Hewitt Lake, Lake Bowdoin, Medicine Lake National Wildlife Refuge and the Charles M. Russell National Wildlife Refuge. Fish and Wildlife also enforces the Endangered Species Act, manages migratory waterfowl, and monitors the aerial hunting of predators.

Montana Department of Fish, Wildlife and Parks

Fish, Wildlife and Parks is responsible for fisheries, big and small game species, and outdoor recreation. BLM has an agreement with Fish, Wildlife and Parks to maintain, manage, and improve wildlife resources in Montana.

Old West Regional Commission

This State-Federal partnership established by the Public Works and Economic Development Act stimulates programs for the orderly growth and development of Montana, among other states. Under the Old West Regional Commission, the Montana Public Lands Council through the "Grazing Assistance and Evaluation Program" facilitates the exchange of information between public land users and BLM and evaluates allotment management plans.

National Park Service

This agency administers the Chief Joseph Battlefield in BLM's Havre Resource Area.

Private Grazing Associations

These nine associations grazing public lands in common easing the management of allotments where there would otherwise be numerous permittees.

HAVER RESOURCE AREA	PHILLIPS RESOURCE AREA	VALLEY RESOURCE AREA
Elbow Grazing Association	Milk River Land & Cattle Association	Whitewater Grazing Association
Eureka Grazing Association	Cottontown Grazing Association	
Mitchell Grazing Association		
Silver Bow Grazing Association		
Signal Butte Grazing Association		
Wood Coulee Grazing Association		

Montana Department of State Lands

AMF often contains varying amounts of state land. Approximately 11 percent of the area is composed of state land, the largest part of which is managed by the Montana Department of State Lands. State land, which often is intermingled with BLM land, is generally leased to individual livestock operators or cooperative state grazing districts on a long term basis. Coordination with the Montana Department of State Lands is continuing as the department becomes increasingly involved in management planning and the development of range improvements.

Water and Power Resource Service

Water and Power Resources (U.S. Department of the Interior) manages Nelson Reservoir, the Milk River Irrigation Project and other reservoirs and water projects in the Prairie Potholes.

LAND OWNERSHIP IN THE PRAIRIE POTHOLE EIS AREA

	# Acres*	% of Total
BLM Administered	1,749,238	11
Water and Power Resources Administration	124,000	1
U.S. Fish and Wildlife Service	65,000	1
Army Corps of Engineers	6,000	-
Other Withdrawals**	5,000	-
State	1,404,000	9
County	52,000	-
Private	10,379,000	68
Bureau of Indian Affairs	<u>1,554,000</u>	10
	15,338,238	

* Rounded to the nearest thousand

** Power site, Canadian border

Source: BLM, 1981.

RESOURCE OBJECTIVES MATRIX

Original Objectives	Enhanced Combined Vegetation uses and Management Alternatives	Enhanced Livestock Forage Alternative	Enhanced Watershed Value & Wildlife Habitat Alternative
LIVESTOCK			
<p>1. Improve or maintain each ANP allotment to achieve at least 625 of potential on 80% of the allotment acreage in 15 years.</p>	<p>1. Improve or maintain each ANP allotment to achieve good ecological range condition on 80% of the allotment acreage in 15 years of ANP operation.</p> <p>(Specific recommendations to achieve the above objective follow in the next ten times.)</p> <ul style="list-style-type: none"> a. Improve range condition and increase forage production on Glacial Till Uplands by grazing systems and/or mechanical treatments. b. Improve range condition and increase forage production on Clay Sedimentary Uplands (subgroups 3 and 4) by the implementation of good grazing practices. c. Improve range condition and increase forage production on Loamy Sedimentary Uplands (subgroup 5) by implementation of good grazing practices, sometimes combined with mechanical treatments on certain soils. d. Improve range condition and increase forage production on Floodplains, Low Terraces, and Wet Basins by implementation of grazing management systems keyed to the needs of the vegetation and soils in these important areas. e. If necessary for the protection or enhancement of riparian or wetland areas, mechanical treatments can speed improvement in range condition and forage production. f. Improve range condition and increase forage production on Fans, Foot-slopes, and Terraces Not Subject to Flooding by implementation of grazing systems and the mechanical treatment of clonous soils. g. Improve range condition and increase forage production on Mountainous Soils with Forest Canopy and Non-forested Soils of Mountain Footslopes by using proper stocking rates and good grazing practices. h. Crested wheatgrass seedlings must have production maximized and up to 70% allocated to livestock. i. Eradicate leafy spurge and other noxious weed infestations. 	<p>1. Improve or maintain each ANP allotment to achieve good ecological range condition on 80% of the allotment acreage in 15 years of ANP operation.</p> <p>(Specific recommendations to achieve the above objective follow in the next ten times.)</p> <ul style="list-style-type: none"> a. Improve range condition and increase forage production on Glacial Till Uplands by grazing systems and/or mechanical treatments. b. Improve range condition and increase forage production on Clay Sedimentary Uplands (subgroups 3 and 4) by the implementation of good grazing practices. c. Improve range condition and increase forage production on Loamy Sedimentary Uplands (subgroup 5) by implementation of good grazing practices, sometimes combined with mechanical treatments on certain soils. d. Improve range condition and increase forage production on Floodplains, Low Terraces, and Wet Basins by implementation of grazing management systems keyed to the needs of the vegetation and soils in these important areas. e. 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<p>2. Increase forage for livestock as a principle output of improvement of the rangeland ecosystem.</p> <p>3. Establish proper stocking rates by allocating present and future vegetation on the basis of the following criteria:</p> <ul style="list-style-type: none"> a. Allocate the allowable use for each plant species to livestock based on SVM proper use factors for each class of livestock and season of use. b. Base allocation on average forage production of perennial species. c. Within proper use, allocate vegetation to livestock forage to meet present and future livestock demand. <p>4. Construct one water supply per section where needed.</p> <p>5. Protect soil and vegetation comparison areas which have been identified or may be identified on public lands.</p>	<p>1. On allotments in predominately fair condition which have early spring (4/1-5/15) use, eliminate damage to plants and soils caused by spring grazing by developing grazing systems to periodically defer early use.</p> <p>2. Increase forage for livestock as a principle output of improvement of the rangeland ecosystem from 319,065 AUMs to 397,721 AUMs by the year 2003.</p> <p>3. Establish proper stocking rates by allocating present and future vegetation to consumptive users based on SVM proper use factors for each ungulate and season of use for an average production year.</p> <p>4. Provide adequate water supplies for livestock with at least one water facility per section.</p> <p>5. Protect soil and vegetation comparison areas identified on public lands.</p> <p>6. Eradicate leafy spurge and other noxious weed infestations.</p>	<p>1. On allotments in predominately fair condition which have early spring (4/1-5/15) use, eliminate damage to plants and soils caused by spring grazing by developing grazing systems to periodically defer early use.</p> <p>2. Increase forage for livestock as a principle output of improvement of the rangeland ecosystem from 319,065 AUMs to 518,215 AUMs in 15 years of AMP operation.</p> <p>3. Establish proper stocking rates by allocating present and future vegetation to livestock users based on SVM proper use factors for each class of livestock and season of use for an average production year.</p> <p>4. Provide adequate water supplies for livestock with at least one water facility per section.</p> <p>5. Protect soil and vegetation comparison areas identified on public lands.</p> <p>6. Eradicate leafy spurge and other noxious weed infestations.</p> <p>7. Eradicate prairie dogs from public lands in the Pothole Area.</p>	<p>1. On allotments in predominately fair condition which have early spring (4/1-5/15) use, eliminate damage to plants and soils caused by spring grazing by developing grazing systems to periodically defer early use.</p> <p>2. Establish proper stocking rates by allocating present and future vegetation to livestock users based on SVM proper use factors for each ungulate and season of use for an average production year.</p> <p>3. Provide adequate water supplies for livestock with at least one water facility per section.</p> <p>4. Protect identified soil and vegetation comparison areas on public lands.</p>
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WILDLIFE

1. Allocate 100% of shoreline vegetation for a minimum of 100 feet around selected fisheries reservoirs to improve water quality, reduce sediment, and improve biological productivity by 1990. The option is retained to improve other reservoirs, either existing or future, which exhibit good fisheries potential.

1. On designated fisheries reservoirs allocate 100% of the shoreline vegetation for a minimum of 100 feet. Retain the option to improve other reservoirs either existing or future, which exhibit good fisheries potential.

1. Forage for existing wildlife populations would be available as it contributes total allowable use.

1. Allocate 100% of shoreline vegetation for 100 feet around selected fisheries reservoirs to improve water quality, reduce sedimentation, and improve biological productivity by 2003. Improve other reservoirs which exhibit good fisheries potential.

(Items "a." and "b." are adjuncts of the above objective.)

a. Manage for good ecological range condition in watersheds above these reservoirs.

b. Reserve all aquatic vegetation in fisheries reservoirs to fisheries benefits.

3. Reserve all aquatic vegetation in fisheries reservoirs for fisheries benefits.

4. By the year 2000, increase streambank cover rating in soil subgroups 6 and 17 (Soil Subgroups Map) from 40-60% to 90% of optimum, increase streambank shading from less than 10% to more than 50% (bank cover rating and stream shading based on Stream Survey, 1979; see TN-783), and change the ecological range condition to good or excellent in selected drainages.

5. Allocate 100% of all vegetation on Water and Power Resources Administration withdrawal lands (soil subgroups 6, 10, 13, and 17 from the Soil Subgroups Map) along Beaver Creek to wildlife and fisheries values within 600 feet of the channel for 6-10 years to allow vegetation to reestablish.

6. By the year 2000, change all stream riparian habitat to 90% of the optimum riparian vegetation (based on Stream Survey, 1979; TN-783) for diversity of terrestrial and aquatic wildlife.

7. By 1995, improve or maintain the ecological range condition of all riparian zones of all water bodies not identified for waterfowl or fisheries values to at least good ecological range condition on all ANP allotments. These include standing water bodies, wetlands, semipermanent ponds, marshes, ditches, borrow pits, etc.

8. a. Maintain native mid and tall grass cover for nesting and brood rearing habitat on those lands with woody vegetation within 1/4 mile of private farm lands (est. 40% use level max.).

b. Allocate all woody vegetation within 1/4 miles of private farm lands for wildlife uses including pheasant brood rearing and winter cover.

c. Maintain native mid and tall grass cover on uplands associated within 1/4 mile of cereal crops for partridge nesting, brood rearing, and escape habitat (est. 40% use level max.).

1. By 2003, improve or maintain the ecological range condition of all riparian zones of all water bodies not identified for waterfowl or fisheries values to at least good ecological range condition on all ANP allotments.

2. Improve or maintain 15% of the total length on high value streams to 90% of optimum streambank cover and all floodplains of designated high value streams to good ecological range condition (ref. TN-783).

2. Improve up to or maintain good ecological range condition based on SVM data in water-sheds that support a fisheries reservoir.

2. Increase the streambank cover rating in soil subgroups 6, and 17 to 90% of optimum, and increase streambank shading to more than 50% and change the ecological range condition to good or excellent in selected drainages.

3. Allocate 100% of all vegetation on Water and Power Resources Administration withdrawal lands (soil subgroups 6, 10, 13, and 17) along Beaver Creek to wildlife and fisheries values within 600 feet of the channel for 6-10 years to allow vegetation to reestablish.

4. By 2003, maintain or improve the ecological range condition of riparian zones of all water bodies unidentified for waterfowl or fisheries values to at least good ecological range condition as determined by riparian surveys.

5. Maintain native mid grass cover for nesting and brood rearing on those lands within 1/4 mile of cereal crops for Hungarian partridge. Maintain native woody vegetation for nesting and brood rearing on those lands within 1/4 miles of cereal crops for ring-necked pheasants.

<p>9. Maintain good or excellent preferred forage and cover among native mid and tall grasses, forbs, and shrubs on soils subgroups 15 and 19 on crucial elk habitat in the Sweet Grass Hills.</p>	<p>5. Maintain good or excellent preferred forage and cover among mid grasses, forbs, and shrubs, on soil group 15 and 19 on crucial elk habitat in the Sweet Grass Hills to support 150 head of elk.</p>		<p>6. Maintain good or excellent preferred forage and cover among native mid grasses, forbs, and shrubs on soil subgroups 15 and 19 on elk habitat on public lands in the Sweet Grass Hills. Allocate forage to support 150 elk on all elk habitat on public lands in the Sweet Grass Hills.</p>
<p>10. a. Maintain big sagebrush with greater than 15% canopy cover (line intercept) and over 12 inches in height within two miles of a sage grouse lek and designated winter ranges for grouse. Maintain silver sagebrush with greater than 10% canopy cover (line intercept) and over 15 inches in height within two miles of a lek and designated winter ranges for sage grouse.</p> <p>b. Allocate native mid and tall grasses for sage grouse nesting and brood rearing habitat within two miles of a lek (est. 400 use level max.). Provide succulent vegetation (forbs) for sage grouse in late spring and summer.</p>	<p>5. Maintain big sagebrush with 15-50% canopy cover and over 12 inches in height and silver sagebrush with greater than 10% canopy cover and over 15 inches in height within two miles of sage grouse leks and on designated winter range for sage grouse and antelope. Maintain a diversity of forbs, grasses, and shrubs on the summer ranges to provide for 7,125-9,500 antelope.</p>		<p>7. Maintain big sagebrush with 15-50% canopy cover and over 12 inches in height and silver sagebrush with greater than 10% canopy cover and over 15 inches in height within two miles of sage grouse leks, designated grouse winter ranges, and designated antelope winter ranges. Allocate native mid grasses for sage grouse nesting and brood rearing habitat within two miles of a lek. Maintain a diversity of forbs, grasses, and shrubs on summer ranges to provide for 14,250 antelope.</p>
<p>11. a. Maintain big sagebrush with greater than 15% canopy cover (line intercept) and over 12 inches in height on antelope winter ranges.</p> <p>Maintain silver sagebrush with greater than 10% canopy cover (line intercept) and over 15 inches in height on antelope winter ranges.</p> <p>b. Maintain a minimum of 50% canopy cover of vegetation on antelope spring-summer ranges to provide for 4,750 antelope (number to be provided), with 5-10% composition shrubs, 5-15% desirable forbs, and 20-25% composition of native mid and tall grasses (20-40 species forbs, 5-10 species shrubs are desirable) on sites where potential exists while meeting good ecological range condition.</p>	<p>6. Allocate vegetation to support the 18 existing prairie dog towns until appropriate habitat management plans are completed. Towns in excess of 40 acres will be reduced to a maximum of 40 acres if no endangered species are determined to exist. No new towns will be allowed. Towns identified in habitat management plans as problem towns may be completely eliminated.</p>		<p>8. Allocate all vegetation on existing black-tailed prairie dog towns to promote self-sustaining populations of black-footed ferret, swift fox, burrowing owl, and mountain plover and to maintain other associated wildlife until such time as problem towns are evaluated by the multidisciplinary team.</p>
<p>12. Allocate all vegetation on black-tailed prairie dog towns to promote self-sustaining populations of the black-footed ferret, swift fox, burrowing owl, and mountain plover and to maintain habitat for other associated wildlife species until such time as problem towns are evaluated by the multidisciplinary team.</p>			

<p>13. a. Provide standing native mid and tall grass cover within two miles of a lek for nesting and brood rearing and winter habitat (est. 40% use level max.).</p> <p>b. Allocate 100% of woody vegetation within two miles of a lek for wildlife uses including sharp-tailed grouse for brood rearing and winter habitat.</p> <p>14. a. Allocate 100% of the woody vegetation on deer winter ranges for wildlife use.</p> <p>b. Allocate forage to support 8,000 deer on spring-summer ranges.</p> <p>15. a. Allocate 100% of emergent vegetation and the vegetation within 100 feet of reservoirs, ponds, and wetlands for waterfowl nesting and brood rearing habitat.</p> <p>b. Maintain a minimum of native mid and tall grass cover on all uplands for nesting waterfowl (est. 40% use level max.).</p> <p>c. Allocate 100% of vegetation on Water and Power Resources Administration withdrawal lands within 600 feet of Beaver Creek to wildlife uses including waterfowl nesting.</p>	<p>7. Within 1½ miles of a sharp-tailed grouse lek maintain or improve woody vegetation and give careful consideration in location of water improvements.</p> <p>8. Maintain or improve woody vegetation on deer winter ranges.</p> <p>9. Allocate 100% of the shoreline and emergent vegetation around 30% of the reservoirs in ANP allotments which will be considered for grazing systems (deferred rotation or rest rotation) because of predominantly fair (50%) range condition.</p> <p>10. Allocate 100% of the wetland and/or riparian vegetation immediately below 30% of reservoirs with seeps which have existing and/or the potential for wildlife habitat.</p> <p>11. Defer spring grazing until July 1 to supply food and cover to wildlife species.</p>		<p>9. Provide standing native mid grass cover within two miles of a sharp-tailed grouse lek for nesting and brood rearing and winter habitat. Allocate 100% of woody vegetation within two miles of a lek for brood rearing and winter habitat.</p> <p>10. Allocate 100% of the woody vegetation on deer winter ranges for wildlife use. Allocate forage to support 24,000 deer on spring-summer ranges.</p> <p>11. Allocate 100% of emergent vegetation and the vegetation within 100 feet of reservoirs, ponds, and wetlands for waterfowl nesting and brood rearing habitat from 4/1-7/1. Maintain a minimum of native mid grass cover on all uplands for nesting waterfowl.</p> <p>12. Allocate 100% of the wetland and/or riparian vegetation immediately below all reservoirs with seeps which have habitat for songame, waterfowl, big game, and upland game or the potential for these habitats.</p> <p>13. Priority should be given to wildlife for increases in vegetation that occur through intensive grazing management.</p> <p>14. Defer spring grazing until July 1 to supply food and cover to wildlife species.</p>
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WATERSHED

1. Minimize water and wind erosion, improve soil productivity, and lessen flooding severity by allocating vegetation production to watershed rehabilitation according to values set in the Table.

2. Water Influence Zones:

Floodplains: Achieve and/or maintain within a period of ten years after implementation of ANRPs:

- a. A minimum of 90% of the optimum streambank cover (TN-283),
- b. A good channel stability rating (based on the Phankuch method).

3. For all floodplains and valley bottoms not described in 2, protect and enhance water quality and retard flooding severity.

4. For Water Influence Zones: High Value Reservoirs: Maintain water quality at levels equal to or better than legal quality standards for fish propagation and body contact recreation (swimming, skiing, etc.) by allocating to watershed 100% of the vegetation within at least a 100 foot buffer zone as measured above the high-water line.

5. Maintain water standards equal to or better than legal standards for water for consumptive uses by livestock and wildlife in low-value Reservoirs.

1. On allotments in predominately fair ecological range condition, implement grazing systems that periodically defer early season livestock use (4/1-5/15) in addition to land treatments and grazing management techniques keyed to specific soil subgroups to improve cover and reduce soil compaction.

2. For all floodplains, protect and enhance water quality and retard flooding severity.

3. For all low-value reservoirs utilized primarily for wildlife and livestock use, maintain water quality to meet or exceed minimum State and Federal water quality standards.

1. On allotments in predominately fair ecological range condition, implement grazing systems that periodically defer early season livestock use (4/1-5/15) in addition to land treatments and grazing management techniques keyed to specific soil subgroups to improve cover and reduce soil compaction.

2. For all low-value reservoirs utilized primarily for wildlife and livestock use, maintain water quality to meet or exceed minimum State and Federal water quality standards.

1. Minimize erosion, improve soil productivity and reduce flooding severity through attainment of target watershed cover percentages for each soil subgroup.

2. On high-value floodplains associated with streams that flow nine months or more of the year and those floodplains associated with soil subgroups 6 and 17, achieve and/or maintain within a period of 15 years after implementation:

- a. A minimum of 90% of the optimum streambank cover (TN-283) and,
- b. A good channel stability rating (based on the Phankuch method).

3. For all floodplains and valley bottoms not described above, protect and enhance water quality and retard flooding severity.

4. On high-value reservoirs managed by BLM, maintain water quality at levels equal to or better than legal quality standards for fish propagation and body contact recreation by allocating to watershed 100% of the vegetation within at least a 100 foot buffer zone as measured above the high-water line.

5. For all low-value reservoirs utilized primarily for wildlife and livestock use, maintain water quality to meet or exceed minimum State and Federal water quality standards.

6. Prevent removal of vegetative cover, prevent soil compaction and soil disturbance in the early spring runoff and spring rainy season due to livestock grazing by delaying grazing until 7/1.

RECREATION, WILDERNESS, VISUAL RESOURCES

1. Allocate to recreation 100% of the riparian zone vegetation around selected reservoirs with recreational opportunities. Other reservoirs existing or future, which have recreational opportunities will be identified in the future.

2. Allocate to recreation 100% of the vegetation within present and future designated recreation sites.

1. Allocate all vegetation within present and future designated recreation sites to recreation.

1. Allocate all vegetation within present and future designated campgrounds within the Missouri Wild and Scenic River Corridor to recreation.

1. Allocate to recreation 100% of the riparian zone vegetation around selected reservoirs with recreational opportunities. Other reservoirs, existing or future, which have recreational opportunities will be identified in the future.

2. Allocate to recreation 100% of the vegetation within present and future designated recreation sites.

3. Allocate to natural history 100% of the vegetation within existing and future vegetation route sites and unique vegetation communities.

4. Consider Visual Resource Management Classes in design and construction of range facilities and land treatments.

5. Manage designated wilderness study areas according to BLM Interim Management Policy and Guidelines for Lands Under Wilderness Review.

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3. Allocate to natural history 100% of the vegetation within existing and future vegetation route sites and unique vegetation communities.

4. Consider Visual Resource Management Classes in the designation and construction of range facilities.

5. Manage designated wilderness study areas according to BLM Interim Management Policy and Guidelines for Lands Under Wilderness Review.

CULTURAL RESOURCES

1. Avoid damage to cultural sites by range improvements according to guidelines in the Programmatic Memorandum of Agreement.

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APPENDIX 1.3: TYPICAL GOALS OF ALLOTMENT MANAGEMENT PLANS

Allotment Management Plans (AMPs) usually follow this format:

- I. Introduction
 - A. Allotment Map
 - B. Guidance from the Land-Use Plan
 - C. Grazing Management Problems
- II. AMP Objectives
- III. Key Species and Phenology
- IV. Planned Grazing Use
 - A. Grazing System and Rationale
 - B. Grazing Formula
 - C. Treatment Schedule
 - D. Normal Operation
 - E. Flexibility
 - F. Approval for Changes in Grazing Use
- V. Range Improvements
 - A. Existing
 - B. Proposed
- VI. Interim Grazing System
- VII. Billing Procedure
- VIII. Studies and Evaluation
- XI. Approval

Goals of the AMP would be listed under "AMP Objectives," Item II. Goals would be specific and applied to particular areas, i.e. "study areas" or "pastures." Typical AMP goals divided by resource would be similar to these:

- II. AMP Objectives
 - A. Range
 1. On Study Area One, improve to good ecological range condition on 80% of the range in 15 years of operation under this AMP.
 - B. Soils and Water
 1. Minimize soil erosion in the Marble Creek Watershed (Study Area One) while maintaining vegetation production by:
 - a. (Methods, etc.)
 - b. (Methods, etc.)
 - c. (Methods, etc.)
 2. Improve the availability of water to livestock in Study Area One by:
 - a. (Methods, etc.)
 - b. (Methods, etc.)
 - c. (Methods, etc.)
 - C. Wildlife
 1. Increase wildlife habitat for big game, upland game birds, waterfowl and nongame species by:
 - a. (Methods, etc.)
 - b. (Methods, etc.)
 - c. (Methods, etc.)
 - D. Recreation/Visual Resources
 1. Improve recreational opportunities on Marble Creek by:
 - a. (Methods, etc.)
 - b. (Methods, etc.)
 - c. (Methods, etc.)
 2. Maintain visual resources in this allotment by applying management objectives of the Visual Resource Management classes for surface-disturbing projects.

A. Description of Prairie Potholes EIS Soil and Vegetation Inventory (SVIM)

An extensive inventory of soils and vegetation of the Prairie Potholes EIS area was conducted in 1978-79 using BLM's Soil and Vegetation Inventory Method (SVIM). The inventory included a total of 2.6 million acres; 1.7 million acres of public land and 900,000 acres of intermingled private and state land. In general, private and state lands were inventoried if they were in the same pasture with public lands, especially if grazing authorizations were governed by BLM through exchange-of-use or percentage of Federal range grazing licenses.

The objectives of the inventory were as follows:

1. To determine the ecological condition of the vegetation resource.
2. To inventory the soils of the area; to understand capabilities and potentials of the soil resource and to link vegetation to soils in order to determine the best management practices for the area.
3. To determine vegetation production, cover, trend and watershed condition in order to make appropriate allocations of vegetation.
4. To develop a base of resource information that could be added to and improved on in future years.

The inventory was conducted as follows:

1. Soil survey maps were used as a base; SCS surveys for Valley, Blaine and Sheridan Counties were available, new inventories were conducted cooperatively with SCS in Phillips, Chouteau, Hill, Liberty, Teton, Glacier and Roosevelt Counties. The new soil surveys were Class 3 (extensive) surveys and included mainly public lands, while the existing SCS surveys were more intensive (Order 1) and included all lands. Range sites for each soil series was determined and noted on the maps.
2. Range condition and vegetation types were determined and assigned to a strata (each soil/vegetation condition class being called a strata) on the soils/range site maps. Helicopters were used to speed this operation as range conservationists estimated ecological range condition and mapped vegetation types while traversing the allotments slowly at altitudes of 10-15 feet. Plots were clipped or estimated regularly to insure accurate estimates. By this method 10,000-20,000 acres could be mapped in a day. South Valley, north Blaine and part of north Valley Counties were mapped in 1978, the remainder in 1979. Four range conservationists and two soil scientists did this work.
3. About 1,800 SVIM transects were located on representative sites to sample all identified strata at a level of 3 transects/strata/resource area. This effort involved about 17 temporary and 10 permanent personnel in 1979.
4. Acres of each strata were tabulated and entered on computer forms. Livestock and wildlife use was tabulated. Range site descriptions and proper use factor tables were developed. Climatic adjustment factors were developed so that average production could be represented.

Problems developed in getting all the data processed through the computer in time for use in the EIS, but the range condition and soils data from the mapping phase were available in time. SCS range site and condition stocking rate guides were multiplied by range site and condition acreage by means of a computer program to determine an SCS recommended stocking rate and potential stocking rate for each allotment. These recommended rates appear in Table 2.3 and were used as the short term livestock allocation in the Enhanced Livestock Forage Alternative. The comparison was made to identify potential problems with the current allocation in lieu of the unavailable SVIM transect data.

The SCS guides as used are very general; they do not consider variability of the production of soil series within the same range site, distance from water or the variable palatability of fenced and unfenced crested wheatgrass. The mapping was general also. For instance, a strata estimated as "good" condition might be a mottled complex of soils and range condition which included more "good" than "fair" condition. Field checks of water availability, range condition estimates, range site productivity in comparison to guides and crested wheatgrass usability would have to be made before the "SCS Recommended" (Table 2.3) rates could be considered accurate.

- B. The following are recommended methods of management and descriptions of range developments. These are provided to further clarify the proposed alternatives and provide guidance in the development of AMPs.

1. Vegetation Allocation

Initial target allocations in Alternatives A, B and D are based on current stocking rates. In A and B these stocking rates would be verified by actual use and utilization monitoring and SVIM transects on range site and condition strata. The proposed allocation to livestock and wildlife is 50 percent of the forage production in A and B. In D the level of use is variable but for most allotments 30-35 percent of the forage would be grazed by livestock. In Alternative C a 50 percent use level is proposed; also SCS stocking guides rather than current stocking would be used as a base. The same inventory and monitoring procedure as A and B would be followed to reach the desired stocking rate.

2. Riparian Fencing and Rest

High value streamside riparian vegetation would be managed in two ways: 1) Fence 100 feet on each side of the stream channel. 2) Rest would be required for 4-10 years. Grazing would be allowed in the late fall/winter on a rotational basis.

Saline seeps and fisheries would be managed by fencing 100 feet around fisheries, fencing one acre areas below reservoirs with seeps. Rest would be required for 4-10 years. Grazing would be allowed in these areas on a periodic basis with the cooperation of a wildlife biologist.

3. Grazing Treatments

Grazing treatments or systems would vary, depending on the allotment situation and the management needed to reach the resource objectives of an alternative. Mitigating measures and procedures are as follows:

1. Fencing of footslopes, floodplains and riparian zones into separate pastures to be grazed in the fall or grazed in a sequence of rest and deferment except where required treatments can be incorporated into allotment-wide grazing systems.
2. In Alternatives A, B and C, consideration would be given to limiting livestock stress by designing grazing systems with the minimum number of pastures necessary to meet resource objectives and by allowing a short drift period between pasture moves.
3. Crested wheatgrass would be used as spring pasture in Alternatives A, B and C where current stands are sizable enough to be fenced into usable pastures or where slight plowing and seeding would expand a stand to a practical size.

4. In Alternative D grazing systems would involve fewer pastures than A, B or C due to the shorter season.

4. Mechanical Treatments

Scalping

Proposed in Alternatives A, B, C and D on slopes of up to 12 percent in soil subgroups 1 and up to 8 percent on subgroups 5, 8 and 9 (see the "Glossary"). Mitigative measures are: (1) interseeding with alfalfa (varieties Rambler and Orenburg) deep enough to use deep moisture and prevent possible saline seeps while providing palatable forage for livestock and wildlife, (2) scalping would not be done in sheep allotments to prevent possible animal loss, (3) scalping would be done according to recommendations by Ryerson, et al. (1970) including fencing of treated areas into separate pastures, scalping on the contour, leaving trails undisturbed and providing check dams.

Scalping with interseeding of alfalfa is the recommended treatment to renovate crested wheatgrass stands.

Contour Furrowing

Proposed in Alternatives A, B, C and D on slopes up to 8 percent in soil subgroup 2 (see the "Glossary"). Mitigative measures are: (1) interseeding with alfalfa (varieties Rambler or Orenburg) to utilize deep moisture and prevent possible saline seep while providing palatable forage for livestock and wildlife, (2) contour furrowing would not be done on sheep allotments to prevent possible animal loss, (3) it would be done per recommendations by Ryerson as with scalping.

Chiseling

An alternate treatment to scalping or contour furrowing proposed on 12 percent slopes in soil subgroup 1 and 8 percent slopes on all other suitable soils ("Glossary"). The mitigative measure is to follow the recommendations of Ryerson (1970) as described above.

Pitting

An alternate treatment to scalping on soil subgroups 1, 5, 8 and 9. Mitigative measures are as described by Ryerson (1970).

Plowing and Seeding

Proposed in Alternatives A, B and C in situations where a small amount of additional crested wheatgrass would make an present stand of crested wheatgrass a usable spring pasture and in A, B, C and D where scattered patches of crested wheatgrass currently unusable and unmanageable would be plowed and seeded to native species.

When a sagebrush community is scheduled for a mechanical manipulation, the following procedure would be followed: 1) a survey of the area to determine the importance of the community for wildlife. 2) a survey of the vegetation to determine the height and canopy cover of sagebrush. 3) an evaluation of the site potential of the area and if the vegetation response would benefit wildlife. 4) no silver sagebrush would be treated. 5) all land treatments would follow the Memorandum of Understanding and supplements between BLM and Montana Department of Fish, Wildlife and Parks.

5. Range Facilities

Fences

Fences in Alternatives A-E would be 3 or 4 wire (barbed) antelope-type fence. The type would also be used around fisheries reservoirs and streamside riparian zones.

Shade Sources

In Alternatives A, B, C and D slash fence 6-8 feet high in sections 25-30 feet long would be used to provide an alternate source of shade, drawing livestock from riparian zones thereby improving riparian vegetation.

Griles, Salt and Minerals

In Alternatives A, B, C and D these would be located together and away from riparian zones. They would be located close enough to upland water sources to be used by livestock.

Snow Harvesting

This would be accomplished by three actions: planting vegetation strip barriers, constructing snow fences and by trapping snow in mechanically treated areas. Together, these actions are designed to stabilize water yield in watersheds modified by mechanical treatments on rangeland and increase vegetation and increase the water yield to downstream users. The first two methods would be systematically placed on landscapes to trap snow for spring snowmelt and runoff. Planting of deciduous shrubs (e.g. skunkbrush sumac) and evergreens (Rocky Mountain juniper) as strip barriers would trap snow and also be used as wildlife habitat. Snow fences would either be the wire and picket type or the larger wood slat fences which could also be used as a shade source for livestock.

Trapping snow in mechanically treated areas interseeded with grasses and alfalfa significantly increases moisture in furrows, producing extra vegetation for ground cover and grazing uses.

6. Water Developments

Water Sources

These include wells, springs, pits and reservoirs proposed in Alternatives A, B, C and D. There would be one water source per square mile. Mitigative measures are: (1) Sealing reservoirs with bentonite and fencing livestock out where there are saline seeps or where seeps could be caused by reservoir construction. Onsite determinations of the probability of saline seeps would be made prior to reservoir construction. Where livestock are excluded, tanks would be located away from the dam for watering. (2) Topsoil would be saved to place on the dam fill. (3) Water sources near woody vegetation in sharp-tailed habitat following Nielson's (1978) recommendations would be located carefully to protect sharp-tail habitat.

Water Quality

The water quality of stock water and fishing reservoirs on public lands would be managed to meet the state of Montana and federal water quality standards for the designed purpose of the reservoir. Methods to improve water quality include development of AMFs, mechanical treatments and grazing treatments that reduce grazing intensities and maintain vegetation cover on watersheds. Vegetation cover promotes water infiltration, reducing overland flow that carries sediment, nutrients, fecal bacteria and other water pollutants to surface water sources.

7. Chemical Control

Noxious Weed Control

In Alternatives A, B, C and D, this would be accomplished with 2,4D and Tordon (Picloram) using hand-held sprayers because of the scattered patchy locations of the noxious weeds. Rough topography would require that part of the work be done with backpacks, although a pickup pumper rig would be used where possible. Several annual applications would be needed to affect control of leafy spurge.

Prairie Dog Control

Zinc phosphide is presently the only toxicant approved for prairie dog control. It will be applied only by persons certified to apply restricted toxicants. All burrows, regardless of condition, are first prebaited with 4 grams (1 teaspoon) of untreated steam-rolled oats per mound. This is applied 1-2 days prior to baiting. After all of most of the prebait is eaten, zinc phosphide treated bait is applied by hand as a 6 inch bait spot on the edge of all burrows. Application rate should not exceed 4 grams (1 teaspoon per bait spot). The treatment would be conducted during the late summer or fall period (July-December) and would only be applied once during this period.

Mechanical treatments would be proposed for rehabilitation of prairie dog towns on suitable soils following control.

8. Monitoring

Monitoring plans would be developed to ensure that resource objectives were met by ANPs. One major part of the monitoring would be benchmark or comparison areas of soils and vegetation. About 70 of these sites of good and excellent condition range representing the major soils have been located and sampled in 1978-80. These sites would be protected by the monitoring of range condition or the fencing of small areas (less than 2 acres).

9. Cultural Resources

Methods of Range Improvements

The BLM recognizes that some of the proposals in the rangeland management program could affect historic and cultural properties. Because of this fact, the BLM will conduct intensive field (Class III) inventories of specific areas that could be impacted by range improvements prior to approval. If historic or cultural resources are found, every effort will be made to avoid adverse impacts. However, where this is not possible, BLM would consult with SHPO and the Advisory Council on Historic Preservation (ACHP) in accordance with the Programmatic Memorandum of Agreement between BLM and ACHP, dated January 14, 1980, (Appendix 4.2) which sets forth procedures for appropriate mitigative measures to lessen adverse impacts.

10. Procedures Used to Determine Impacts to Visual Resources

Impacts to visual quality in this EIS were determined through analysis of allowable management actions within the five visual management classes as they are defined in Bureau Manual 8400. The overall level of impact was determined by the full EIS interdisciplinary team during impact analysis. Projects were analyzed in term of their potential to create the following types of effects:

- Ground disturbance, including roads and trails, constructed for access and/or maintenance of the project.
- Creation of structures not homogenous to the visual scene.
- Color changes which occur from vegetative manipulations. This could be either removal of native vegetation or the introduction of additional non-native vegetation.
- Livestock concentration areas to include reservoirs and other water sources and the associated impacts of compaction, trailing and erosion.
- Grazing systems and the associated fence and fencing contracts.

Each type of impact was evaluated as to whether or not it would create a high, moderate or low contrast if it were done in each one of the four visual classes landscapes found in the Prairie Potholes EIS area. High contrasts would be created by those landscape changes that demand attention. They could not be overlooked. The contrast would be inharmonious to the basic scenery elements of line, form, color and texture. High contrast projects could not meet management class objectives without mitigation.

Moderate contrasts would be to attract attention and dominate the landscape. A project that would create a moderate contrast could only meet Class III and IV management objectives without mitigation.

Low contrasts might or might not dominate the scene, but because of the quality of the scenery or the size and scope of the project, it would meet all of the management class objectives.

This analysis assumes that the projects would be viewed from the foreground (up to one mile). The impacts to visual class would be rated at the time of the projects if no special mitigating measures are applied. Over time, nature might mitigate the impacts through revegetation. Also standard operating procedures would allow many projects to be accomplished within allowable visual class guidelines.

11. Leafy Spurge Computations

Without noxious weed control, 5,280 acres of public land in North Valley County would be infected by these species by 2003. This estimate was computed as follows:

- Assume constant rate of spread since first infestation in 1930s, i.e. from 0 to 8,555 total acres in 40 years (mid 1930s to 1975) and that BLM lands would be infested at same rate as other lands in the Rock Creek area of Valley County.
- Rate of spread was derived by plotting the known acreage in 1935 and 1975 and computing the annual rate of increase in a radius needed to reach the 1975 acreage. The radius expanded to 271.
- By this method it was determined that 24,000 acres would be infested by 2003. Assuming conservatively that public lands would continue to be infested at the same rate as non-public lands (in 1975, 22 percent of the total infested acreage was public land and the land ownership pattern in the area is mixed; infestations appear to be moving away from the already infested drainages which are mostly private land onto the uplands which are mostly public. It was computed that 5,280 public land acres would be infested by 2003 ($24,000 \text{ acres} \times .22 = 5,280$).

Productivity and grazing availability of native vegetation would be reduced by up to 75 percent on these 5,280 acres (Leafy Spurge Symposium, 1979, p. 23) by leafy spurge.

Background Data

A computer printout of the acreage and range condition class of each soil series in each allotment provided the base for making projections of improvement in range condition and productivity in response to management. The first step was to categorize each soil according to expected response to management; whether the soil would (1) improve with grazing management alone, (2) require treatments to improve, (3) be unresponsive to grazing management and not recommended for treatments. The basis for making these categories is explained in Chapter 3 (Vegetation & Soils) and details of recommended management practices and soil limitations can be found in Appendices 3.1 and 3.2. The soil series categories are as follows: (Numbers in parentheses are soil subgroup numbers).

A. Mechanical Treatments needed in combination with grazing treatments

(1) Bearpaw, Dooley, Joplin, Kevin, Phillips, Scooby, Telstad, Vida, Williams. (2) Ellosa, Theony, Tealete. (3) Delpoint, Doney, Lonna, Mammoth, Reeder. (4) Assiniboine, Busby, Chinook, Cosberg, Parshall, Tally. (5) Attawan, Benz, Bittion, Brockway, Swanston, Farland, Farnum, Flowerue, Judith, Kramlin, Lambeth, Macar, Martinsdale, Redvale, Shawmut, Straw, Turner, Work, Yamac, Redvale. (10) Acel, Cherry, Ethridge, Linnet, Macar, Richey, Savage, Shalk. (11) Creed, Gerdum.

B. Respond to Grazing Treatments improve to next condition class in 15 years

(1) Sunburst, Hillon, Zahl, Zahill. (3) Dilt, Julia, Teigen. (4) Abor, Barkof, Bascovy, Dinyav, Lisan, Neldore, Norbert, Thebo. (5) Cabba, Yawin, Cabbert, Dast, Delpoint, Erum, Bentacac, Riedel, Twilight. (6) Bowdoin, Gasa, Glendive, Hanly, Harlen, Havrelin, Kawanis, Korchea, Korent, Lallie, Lardell, Lohler, Nanda, Riva, Trembles (all other soils in subgroup 6). (7) Lihen, Blanchard, Yutall, Hawkswell. (10) Crail, Kobar, Lawther, Lothier, Marias, Marvan, Pandroy. (12) Absher, Adger. (18) Belstin, Hadesa, Lolo. (19) Gasterner, Chasde, Libeg, Perma, Warnake.

C. Unaffected for Treatments, unresponsive to grazing management

(12) Mobe. (13) Vaeda, Vanda. (14) Beaverell, Beaverton, Tinsloy, Wabek, Windan. (15) Arcette, Belsin, Concord, Elve, Gashier, Lola, Mcmesel. (6) Weingart, Rapp, Rickiestests, Silverchief, Trapper, Warnake, Whitcaw, Whitore.

Only subgroups 3 and 6 above are projected to improve to excellent under grazing management alone.

Livestock Allocation Computations

Once these soil categories were set up the following procedures were used to establish the allocation in the short and long term for each alternative. The order that the process was completed differs from the alphabetical order of the alternatives because calculations in A, B and D hinged on calculations done in C. An example of the calculations follows the narrative explanation.

Enhanced Livestock Forage (Alternative C)

Short Term - Used SCS recommended rate unless unique allotment situation invalidated the data.

Long Term - Current capacities for each series were determined and maintained or adjusted to the capacity of higher condition classes or the estimated capacity following treatment (seeding, weeding, fertilization, etc.) depending on soil capabilities and responses to grazing management. Capacities were according to SCS guides, estimates of increased forage due to treatments were based on literature (Ryerson, et al., 1970; Ryerson, Taylor and Houlton, 1974; Ryerson, Houlton and Wambolt, 1980; and Ryerson and Houlton, personal communication, 1980).

All acreage suited for treatments that could not be expected to improve under management alone was "treated". Production increases documented in the literature ranged from 150-900 percent but 200-250 percent was about average. In this procedure, fair and poor condition capacities were increased by 250 percent, good condition by 200 percent.

Values for increases due to treatments in each allotment were noted separately from natural increases. Fair and poor condition increases due to treatments were noted separately from treatment increases on soils in good condition.

Enhanced Combined Uses (Alternative A)

Short Term - Used current allocation. Long Term: A) If allotment was currently at or near 80 percent good and excellent condition (Objective 1, Range Management) and the potential for increased forage as determined in Alternative C, net or exceeded 22 percent of current levels (Objective 2, Range Management), current levels were multiplied by 1.22 to show a 22 percent increase in the long term. B) If range condition was less than 80 percent good and excellent, natural and treatment increases due to improvement from fair and poor to 80 percent good and excellent were added to current levels. This illustrated the increase forthcoming due to improvement in range condition to 80 percent good and excellent by grazing management and land treatments.

Enhanced Watershed and Wildlife (Alternative D)

Short term - AUMs during period April 1 to June 30 were computed and subtracted from current levels. If the allotment included valuable riparian areas the capacity of these areas was deducted, assuming that it would be fenced. Long term - In the long term the objective (Range Management No. 1) of 80 percent good condition would be met as explained in A(b) above. Forage increases due to improvement in condition would be allocated at only 66 percent. Thus if an allotment was less than 80 percent good, the long term increase as computed in A(b) was multiplied by .66 and added to the current allocation. If the allotment was already 80 percent good or excellent no change was made in the stocking level in the long term.

Continued Present Program (Alternative B)

The same short and long term values as Alternative A were used if allotment was selected as priority for AMP development; or was an existing AMP. Current allocations were continued if allotment was not selected for AMP.

No Livestock Grazing (Alternative E)

No livestock allocation in short or long term.

No Action (Alternative F)

Continuation of current allocations in short and long term.

Range Condition Computations

The projected range condition acreages shown in Alternatives A, B, C, D are the summary of the acres in AMP allotments which (1) fall under the category B (above); with all acres in poor and fair improving to fair and good respectively and these acres in good condition in subgroups 3 and 6 (and 15 and 17 - which is included in 3 and 6) would improve to excellent. All acreage of natural improvement was adjusted by a factor of 80%, based on a judgment which allows for livestock preferred areas and any other factor which would limit achievement of 100% response under grazing. (2) treated soils in each alternative were derived as discussed above by alternative; projected condition in the long term is 75% excellent and 25% good.

In the No Livestock Grazing Alternative, range condition projections (as compared to grazing alternatives) were altered somewhat; (2) total acreage rather than AMP acreage was used (2) it was estimated that subgroups 6 and 6 would improve two condition classes (versus one under grazing) and that subgroups 4, 8, 10, 13 and 19 would improve to excellent from good (would stay in good under grazing).

The projections of long term range condition in the No Action (F) Alternative are based primarily on projections of the spread of noxious weeds and prairie dogs. The loss of forage due to these factors would result in deteriorated condition on other acres under a constant level of allocation. While it is impossible to accurately determine how many additional acres would deteriorate an estimate of 125,000 acres, about half of the acreage expected to be affected by prairie dogs and noxious weeds was made. For example, if 10% of an allotment was affected by prairie dogs and/or noxious weeds an additional 5% would also decline due to heavier grazing.

Example of Allocation Computations by Alternative (A, B, C and D): Hypothetical allotment X. Current livestock Allocation Allotment X 200 c 5/1 - 10/31 1,200 AUMs

Existing Capacity by Range Site Per SGS Grazing Guides:

Phillips Soil (Silty Range Site) good condition	Elloam Soil (Clay pan Range Site) fair condition
1,000 acres x .3 AUM/acre = 300 AUMs	1,000 acres x .12 AUM/acre = 120 AUMs
Phillips Soil (Silty Range Site) fair condition	Sunburst Oil (Thin Clayey Range Site) fair condition
1,000 acres x .2 AUM/acre = 200 AUMs	1,000 acres x .12 AUM/acre = 120 AUMs
Diets Soil (Coarse Clay Range Site) good condition	
2,555 acres x .18 AUM/acre = 460 AUMs	

Total Acres	Excellent	Good	Fair	Poor	Unclassified
6,555	0	3,505	3,000	0	0

Alternative C

Step 1. Calculate AUMs due to mechanical treatments (2X for good, 2.5 X for fair)

Phillips, good condition 1,000 acres/300 AUMs - 300 AUMs X 2 = 600 AUMs following treatment (300 increase)	
Phillips, fair condition 1,000 acres/200 AUMs - 200 AUMs X 2.5 = 500 AUMs following treatment (300 increase)	
Elloam, fair condition 1,000 acres/120 AUMs - 120 AUMs X 2.5 = 300 AUMs following treatment (180 increase)	
Total Acres Treated: 3,000 (75% excellent)	Total AUM Increase: 780

Step 2. Calculate AUMs due to natural improvement

Sunburst, fair condition 1,000 acres/120 AUMs 80% would improve to good.	
1,000 X .8 = 800 X .18 AUMs/acre (capacity in good condition) = 144 AUMs. 144 - 120 = 24 AUM increase	
Diets, good condition 2,555 acre/460 AUMs 80% would improve to excellent.	
2,555 X .8 = 2,044 X .25 AUMs/acre (capacity in excellent condition) = 511 AUMs. 511 - 460 = 51 AUM increase.	
Total Acres improved = 2,844, increase in AUMs = 75	

Summary (Step 3)

AUM increase - Mechanical 780 AUMs, Natural 75 AUMs Total AUMs: 1,200 + 780 + 75 = 2,055 (71% increase)

Range Condition Improved. Mechanical Treatments (3,000 acres) - 2,250 acres improved to excellent, 750 improved or maintained in good. Natural increases: 800 acres improved from fair to good, 2,044 acres improved from good to excellent.

Long Term Result

Allotment Acres	Excellent	Good	Fair	Poor	Unclassified
6,555	4,294	2,061	200		

Alternative A (and AMP Allotments in Alternative B)

Step 1. Use calculations done in C above to (1) see that there is potential for 22% increase in forage (in this example the potential for a 71% increase in forage was determined in C) (2) calculate AUMs accruing from improving the allotment to 80% good or better.

In this allotment if 900 acres of fair condition silty soils were mechanically treated, the objective of 80 good or better would be achieved. After natural improvements (C above) 100 acres silty, 1,000 acres claypan and 200 acres thin clayey would remain in fair condition. Fair condition would total 1,300 acres about 20% of the allotment acres.

Nine hundred acres of mechanical treatment on a fair condition silty site would result in the following AUM increase: 900 acre X .2 (present capacity in AUMs/acre) = 180. 180 X 2.5 (increase due to treatment) = 450 - 180 = 270 AUM increase. 270 divided by 1,200 (current AUMs) = 22.5% increase due to treatments.

Summary

AUM increase - mechanical 270, natural 75 = 345 (28.7% increase)

Range Condition Improved

Mechanical Treatments (900 acres)	Natural Increases
675 acres improved from fair to excellent	800 acres improved from fair to good
225 acres improved from fair to good	2,044 acres improved from good to excellent
1,000 acres in good (no change)	
100 acres in fair (no change)	

Long Term Result

Allotment Acres	Excellent	Good	Fair	Poor	Unclassified
6,555	2,719	2,536	1,300		

Alternative D

In this example, treatment acres needed to reach 80% good or better would be the same as proposed in A and B. Long term range condition would also be the same. AUMs would differ as follows.

- Reduced due to no grazing 4/1 - 6/30 changes use from 200 c 5/1 - 10/31, 1,200 AUMs to 200 c 7/1 - 10/31, 800 AUMs
- Long term increases are allocated at 33% utilization (livestock AUM increases multiplied by .66).

Summary: AUM increase - mechanical 270 X .66 = 178, plus natural 75 X .66 = 50. Total increase 228
Long term allocation 800 + 228 = 1,028 AUMs, 257 c 7/1 - 10/31, 1,028 AUMs

This process, in a much more complicated form due to more soil series than shown in the example, was repeated for each of the 512 AMP allotments.

APPENDIX 2.3: ALLOTMENT SUMMARIES

This appendix summarizes current information on the allotments in the EIS area, including:

Allotment names and numbers

Management status

Allotment acres in excellent, good, fair, poor and unsuitable condition

Numbers of grazing animals

Seasons of use

Current AUMs

Recommended stocking rates (AUMs)

Potential forage production

Allocations by alternative

These abbreviations are used in this appendix:

MANAGEMENT STATUS (MGT. STS.)

P - Proposed AMPs
N - Non-AMPs
E - Existing AMPs

GRAZING ANIMALS

No. - Number
CLS - Class
C - Cattle
AN - Antelope
DM - Deer
H,HO - Horses
Y - Yearlings (Cattle)
SH,S - Sheep

HAYRE RESOURCE AREA PROPOSED AMPs (NOT PROPOSED IN ALTERNATIVE 8)

ALLOT, NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION		POOR		UNSUITABLE		CHARTIC ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	FAIR	BLM	OTHER	BLM	OTHER	NO.	CLS
			2603.6	6784.0	0	0	1732.0	3150.2	871.6	5633.8	0	0	0	0	10	AN 5 DM
6005	Davies Ranch	P	6073.2	673.0	0	0	5047.9	650.1	984.4	22.9	40.9	0	0	0	90 230 CA 24 AN 13 DM	CA
6007	Lyons Creek	P	1835.4	1162.0	0	0	1431.7	821.1	403.7	340.9	0	0	0	0	100 7 AN 5 DM	CA
6008	Canada-Line	P	1991.8	1017.1	0	16.0	1991.8	999.9	0	0	0	0	0	1.2	200 8 AN 4 DM	CA
6009	Meridian	P	594.4	604.9	0	0	594.4	604.9	0	0	0	0	0	0	90 3 AN 1 DM	CA
6013	Reservoir Allotment	P	1024.4	2591.2	0	0	770.6	2481.2	253.8	12.0	0	0	0	98.0	72 4 AN 2 DM	CA
6017	Sisoma	P	798.7	1932.3	0	0	272.6	984.9	526.1	947.4	0	0	0	0	61 3 AN 3 DM	CA
6021	Customs	P	813.8	1123.4	0	0	813.8	1123.4	0	0	0	0	0	0	60 4 AN 1 DM	CA
6027	Anderson	P	879.4	79.8	0	0	559.7	79.8	319.7	0	0	0	0	0	52 1 AN 3 DM	CA
6029	Sanda-Davies Common	P	1581.0	322.4	0	0	560.1	228.6	1020.9	93.8	0	0	0	0	92 6 AN 1 DM	CA
6030	McClaren	P	1125.4	604.7	0	0	1125.4	604.7	0	0	0	0	0	0	59 5 AN 2 DM	CA
6031	Corner	P	1246.6	811.1	0	0	1246.6	811.1	0	0	0	0	0	0	45 5 AN 4 DM	CA
6033	Corral Creek	P	2399.2	2775.3	28.0	0	787.3	1138.3	1583.9	1637.0	0	0	0	0	180 9 AN 3 DM	CA
6035	Upper Corral	P	1751.4	3036.7	0	0	1253.4	3029.2	491.1	2.0	0	0	6.9	5.5	296 7 AN 4 DM	CA
6037	Little Cherry	P	597.3	39.8	0	0	597.3	39.8	0	0	0	0	0	0	33 3 AN 3 DM	CA
6039	Hawge	P	1766.4	8189.9	0	0	1410.3	7765.3	330.6	183.4	0	0	25.3	241.2	84 7 AN 6 DM	CA
6040	Diagonal	P	1241.6	2332.2	0	0	936.9	1513.2	281.4	112.7	0	0	23.3	606.3	62 5 AN 4 DM	CA
6041	Cherry Ridge	P	965.3	5169.4	250.7	119.8	655.4	4108.1	55.7	884.3	0	0	3.5	57.2	211 4 AN 3 DM	CA
6043	Murray Coulee	P	790.6	119.9	0	0	436.6	119.9	354.0	0	0	0	0	0	50 3 AN 3 DM	CA
6046	Jergensen Co.	P	1846.3	3240.3	0	0	731.1	1605.8	1115.2	1341.5	0	0	0	293.0	180 6 AN 8 DM	CA
6048	Lodge Creek	P	1189.9	928.3	0	0	209.9	0	980.0	662.3	0	0	0	266.0	58 5 AN 3 DM	CA
6050	Trails End	P	958.9	40.0	0	0	0	0	958.9	40.0	0	0	0	0	23 3 AN 6 DM	CA
6051	Tee Trail	P	799.8	794.4	0	0	648.5	792.4	151.3	2.0	0	0	0	0	42 3 AN 3 DM	CA
6052	North Chinook Common	P	1436.3	572.5	0	0	405.8	51.9	954.6	245.7	75.9	274.9	0	0	27 6 AN 4 DM	CA
6053	Marker	P	539.3	0	0	0	116.0	0	423.3	0	0	0	0	0	38 2 AN 1 DM	CA

SEASON OF USE	CURRENT AUM		REC. STOCKING		POTENTIAL FORAGE		ALTERNATIVE A ENHANCED COMBINED VEG. USES		ALTERNATIVE B COMB. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATERWILLIAGE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLN	OTHER	BLN	OTHER	BLN	OTHER	BLN	OTHER	BLN	OTHER	BLN	OTHER	BLN	OTHER	BLN	OTHER	BLN	OTHER
06/13-1/15	528	1307	609	1474	914	2373	528	1642	528	528	609	1342	476	534	0	0	528	528
04/01-03/31	16																	
04/01-03/31	12																	
05/05-09/22	1140	125	1538	185	2189	250	1140	1391	1140	1140	1538	2666	981	986	0	0	1140	1140
07/03-10/18																		
04/01-03/31	38																	
04/01-03/31	31																	
05/01-09/26	325	164	456	281	663	420	325	397	325	325	456	826	168	197	0	0	325	325
04/01-03/31	11																	
04/01-03/31	11																	
07/01-09/30	367	254	534	279	715	372	367	448	367	367	534	909	367	367	0	0	367	367
04/01-03/31	13																	
04/01-03/31	10																	
06/01-08/25	163	239	146	150	195	202	163	233	163	163	163	300	56	56	0	0	163	163
04/01-03/31	5																	
04/01-03/31	2																	
05/01-10/31	223	493	253	678	368	910	223	276	223	223	253	626	178	213	0	0	223	223
04/01-03/31	6																	
04/01-03/31	5																	
06/01-08/31	153	242	160	464	280	749	153	300	153	153	160	384	123	220	0	0	153	153
04/01-03/31	5																	
04/01-03/31	7																	
06/16-10/06	157	73	238	329	318	440	157	192	157	157	238	445	136	136	0	0	157	157
04/01-03/31	6																	
04/01-03/31	2																	
06/01-08/29	142	48	225	23	341	31	142	179	142	142	225	440	103	127	0	0	142	142
04/01-03/31	2																	
04/01-03/31	2																	
06/01-10/01	316	200	326	72	554	106	316	500	316	316	326	669	230	351	0	0	316	316
04/01-03/31	9																	
04/01-03/31	2																	
04/16-07/13	200	103	296	151	397	203	200	244	200	200	296	574	103	103	0	0	200	200
04/01-03/31	8																	
04/01-03/31	5																	
04/01-02/28	225	238	354	248	473	329	225	275	225	225	354	728	139	204	0	0	225	225
04/01-03/31	8																	
04/01-03/31	10																	
05/10-09/19	463	775	636	586	1106	966	463	746	463	463	636	1236	350	537	0	0	463	463
04/01-03/31	14																	
04/01-03/31	12																	
06/15-09/24	321	580	395	758	579	1020	321	392	321	321	395	791	264	290	0	0	321	321
04/01-03/31	11																	
04/01-03/31	9																	
05/01-07/30	91	7	155	10	208	14	91	111	91	91	155	268	30	30	0	0	91	91
04/01-03/31	5																	
04/01-03/31	7																	
03/01-02/28	396	1332	451	2170	649	2934	396	483	396	396	451	816	319	319	0	0	396	396
04/01-03/31	11																	
04/01-03/31	14																	
05/17-02/28	335	279	300	414	438	572	335	409	335	335	300	450	304	324	0	0	335	335
04/01-03/31	8																	
04/01-03/31	10																	
05/15-10/13	181	994	339	1388	409	1950	181	221	181	181	339	451	132	132	0	0	181	181
04/01-03/31	8																	
04/01-03/31	7																	
05/01-09/30	216	40	212	37	328	49	216	298	216	216	212	387	215	269	0	0	216	216
04/01-03/31	5																	
04/01-03/31	7																	
05/18-08/09	324	209	390	792	654	1221	324	508	324	324	390	847	156	278	0	0	324	324
04/01-03/31	13																	
04/01-03/31	14																	
03/01-02/28	242	573	266	124	486	247	242	957	242	242	266	570	172	644	0	0	242	242
04/01-03/31	8																	
04/01-03/31	7																	
05/01-11/30	175	7	164	7	328	13	175	257	175	175	164	273	125	176	0	0	175	175
03/01-10/30																		
04/01-03/31	9																	
04/01-03/31	10																	
05/01-10/30	154	16	218	215	309	289	154	199	154	154	218	384	68	86	0	0	154	154
04/01-03/31	5																	
04/01-03/31	7																	
05/01-09/30	339	69	273	81	500	210	339	511	339	339	273	606	294	408	0	0	339	339
04/01-03/31	9																	
04/01-03/31	10																	
05/01-06/24	102	0	113	0	199	0	102	174	102	102	113	224	18	66	0	0	102	102
04/01-03/31	3																	
04/01-03/31	2																	

HAVRE RESOURCE AREA PROPOSED AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		NO.	CLS
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER				
6056	Dry Fork	P	1636.4	624.2	0	0	318.6	173.9	1316.8	447.1	0	0	1.0	3.2	88	CA
															6	AN
															3	DN
6057	Oil Well	P	4808.4	7291.5	0	0	3275.0	6099.7	1515.3	1118.9	10.9	0	7.2	72.9	250	CA
															17	AN
															12	DN
6058	Pothole	P	3978.3	8972.5	0	0	3978.2	8912.2	0	0	0	0	0.1	60.3	675	CA
															14	AN
															8	DN
6060	North Madish	P	638.9	318.8	0	0	638.9	318.8	0	0	0	0	0	0	111	CA
															3	AN
															1	DN
6066	Harner	P	1453.3	638.8	0	0	5.7	131.7	1447.2	487.1	0	0	2.4	20.0	315	CA
															6	AN
															4	DN
6072	Red Rock Coulee	P	1122.0	1504.2	0	0	1055.0	1166.2	25.0	114.8	0	0	42.0	223.2	102	CA
															4	AN
															3	DN
6083	Battle Creek	P	1419.4	2575.9	0	0	1126.4	2097.8	133.5	347.7	0	0	159.5	130.4	160	CA
															6	AN
															86	AN
															8	DN
6086	Salmo	P	2014.5	843.1	0	0	1693.3	834.8	130.0	0	0	0	191.2	8.3	122	CA
															8	AN
															76	AN
															10	DN
6087	North Coal Coulee	P	1815.6	3049.2	0	0	964.1	1690.9	850.2	1346.5	0	0	1.3	11.8	125	CA
															6	AN
															5	DN
6088	West Coal Coulee	P	639.8	79.7	0	0	6.9	0	632.9	79.7	0	0	0	0	80	CA
															3	AN
															2	DN
6090	Big Long	P	1982.6	4312.4	0	0	1053.3	3714.0	929.3	487.4	0	0	0	111.0	130	CA
															8	AN
															3	DN
6091	Two Step	P	913.6	3601.6	0	0	903.3	2257.3	0	0	0	0	10.3	1344.3	115	CA
															4	AN
															3	DN
6092	Road Bend	P	1148.9	824.0	0	0	1083.9	824.0	0	0	0	0	65.0	0	83	CA
															5	AN
															2	DN
6095	Faulty Pasture	P	1991.7	3644.1	0	0	1790.4	3505.7	0	0	0	0	201.3	138.4	250	CA
															8	AN
															9	DN
6101	Modic	P	1783.4	1126.0	0	0	681.1	806.2	1042.3	319.8	0	0	60.0	0	181	CA
															1	AN
															4	DN
6103	North Refuge	P	598.7	88.6	0	0	311.0	88.6	282.4	0	0	0	5.3	0	135	CA
															1	AN
															2	DN
6105	Little Jewel	P	319.5	639.8	0	0	204.9	624.9	114.7	14.9	0	0	0	0	5	CA
															1	AN
															1	DN
6107	Liese-Van Yeast Cotton	P	2706.2	2543.4	0	0	2231.8	1695.7	390.9	785.6	4.0	10.0	79.5	52.1	205	CA
															2	AN
															12	DN
6119	Lower Wayne Creek	P	7050.8	14762.9	0	0	5839.2	13000.1	876.2	1542.6	0	0	335.4	220.2	133	CA
															233	CA
															108	CA
															114	CA
															51	CA
															215	CA
															4	AN
															25	DN
6120	Willie Allotment	P	1630.7	2988.8	0	0	1593.3	690.8	0	0	0	0	37.2	2298.0	160	CA
															1	AN
															6	DN
6121	Exclosure	P	1480.2	1356.6	0	0	1478.2	895.6	0	0	0	0	2.0	461.0	131	CA
															1	AN
															3	DN
6122	Black Creek	P	1119.7	3088.2	0	0	880.2	2029.5	234.8	936.0	0	0	4.7	122.7	200	CA
															1	AN
															5	DN
6123	Finger Lakes	P	1793.8	0	0	0	1187.1	0	606.7	0	0	0	0	0	600	CA
															1	AN
															3	DN
6125	Matador	P	1385.9	1675.7	0	0	1277.6	1542.2	106.6	133.0	0	0	1.7	0.5	120	CA
															1	AN
															4	DN

[illegible]

HAVRE RESOURCE AREA PROPOSED ANP& CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
6129	Llano	P	3733.1	100.5	0	0	5581.4	100.5	443.4	0	0	0	8.4	0	285	CA
															5	AN
															16	DM
6131	Drake Creek	P	1926.7	7367.3	0	0	1794.7	6273.6	84.3	950.1	0	0	47.7	143.6	300	CA
															2	U
															11	AN
															5	DM
6132	Milk Creek	P	2208.1	13003.0	0	0	1733.3	10070.2	470.6	2613.7	0	0	4.2	319.1	175	CA
															1	AN
															4	DM
6133	Habitat	P	762.6	2725.7	0	0	759.8	2449.0	0	210.3	0	52.0	2.8	14.4	153	CA
															1	AN
															3	DM
6134	Coburg	P	1499.4	1850.2	0	0	1428.9	1790.3	0	16.0	0	0	70.5	43.9	101	CA
															1	AN
															9	DM
6136	Junction	P	3461.3	4307.9	0	0	3385.8	3581.9	68.9	242.9	0	0	6.6	683.1	89	CA
															2	AN
															3	DM
6137	Ureka	P	1637.9	3570.9	0	0	1137.4	2569.5	450.5	907.6	0	0	50.0	93.8	215	CA
															1	AN
															8	DM
6159	Myrtle Butte	P	1134.4	0	0	0	583.9	0	462.7	0	0	0	87.8	0	17	CA
															7	AN
															9	DM
6160	North McGuire	P	857.8	0	0	0	235.3	0	568.4	0	0	0	54.1	0	24	CA
															5	AN
															3	DM
6175	Warrick Junction	P	658.7	0	0	0	278.8	0	151.4	0	0	0	228.5	0	8	CA
															4	AN
															6	DM
6228	Fort	P	119.9	680.7	0	0	119.9	650.7	0	30.0	0	0	0	0	25	CA
															1	AN
															1	DM
6229	Guide	P	479.2	126.7	178.9	0	100.8	126.7	199.5	0	0	0	0	0	65	CA
															2	AN
															1	DM
6233	Airstrip	P	2607.2	2683.6	0	0	1722.5	2370.1	880.9	312.9	0	0	3.8	0.6	188	CA
															10	AN
															7	DM
6234	Quarter	P	226.4	28.9	0	0	179.5	28.9	46.9	0	0	0	0	0	33	CA
															1	AN
															1	DM
6235	Tule Lake	P	3214.4	7613.2	0	0	2792.8	6103.9	403.0	1428.4	0	0	19.0	82.9	465	CA
															13	AN
															10	DM
6236	South	P	1524.8	473.5	0	0	1524.8	473.5	0	0	0	0	0	0	80	CA
															6	AN
															4	DM
6239	West Forgey Creek	P	3719.7	8440.3	0	0	3369.7	8328.7	10.0	0	0	0	340.0	111.6	314	CA
															15	AN
															118	AN
															15	DM
6244	Murray Creek	P	236.6	476.6	0	0	98.0	66.0	138.6	250.6	0	0	0	160.0	8	CA
															1	AN
															1	DM
6302	Snake Butte	P	2024.6	1891.5	0	0	1622.4	547.7	157.4	1319.6	0	0	24.8	24.2	300	CA
															11	AN
															10	DM
6356	Syncline	P	98.9	0	0	0	0	0	372.0	0	24.9	0	2.0	0	10	CA
															1	AN
															2	DM
6360	Hannon	P	593.2	0	0	0	55.4	0	489.8	0	0	0	48.4	0	12	S
															2	AN
															4	DM
6364	Shelby	P	302.3	0	0	0	0	0	240.9	0	38.9	0	22.5	0	14	CA
															2	AN
															5	DM
6389	Marsh Hawk	P	1860.3	0	547.7	0	0	0	0	0	0	0	1312.6	0	26	CA
															4	AN
															87	DM
															20	ER
6395	Dulles	P	199.7	0	64.5	0	24.2	0	0	0	0	0	111.0	0	3	CA
															1	AN
															9	DM
															2	ER

SEASON OF YEAR	CURRENT WOLF	AUMS OTHER	REC. STOCKING		FOYEN. FORAGE		ENHANC. CONDINED		CONT. OF		ENHANCED		ENHANCED		NO LIVESTOCK		NO ACTION	
			RATE/AUMS		PRODUCION		VEG. USFS		PRESENT MONT.		LIVST. FORAGE		NATURALWILDLIFE		CRAG ING.		ST	
			ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-10/01	1176	23	1452	27	2007	37	1126	1374	1126	1126	1452	2697	847	865	0	0	1126	1126
04/01-03/31	8																	
04/01-03/31	43																	
04/20-10/16	378	1453	486	1847	661	2571	378	461	378	378	486	1241	229	236	0	0	378	378
04/01-03/31	2																	
04/01-03/31	12																	
05/01-09/30																		
05/23-02/15	462	1068	580	3128	837	4509	462	564	462	462	580	1101	448	459	0	0	462	462
04/01-03/31	2																	
04/01-03/31	10																	
06/01-10/15	199	492	208	670	279	966	199	243	199	199	208	400	155	155	0	0	199	199
04/01-03/31	7																	
04/01-03/31																		
04/25-11/20	245	404	348	462	466	622	245	299	245	245	348	517	161	165	0	0	245	245
04/01-03/31	2																	
04/01-03/31	22																	
04/01-02/29	884	518	988	1029	1333	1411	884	1078	884	884	988	1572	549	549	0	0	884	884
04/01-03/31																		
04/01-03/31																		
05/04-11/03	350	973	347	800	522	1182	350	427	350	350	347	539	244	248	0	0	350	350
04/01-03/31	2																	
04/01-03/31	19																	
03/01-02/28	203	0	314	0	485	0	203	257	203	203	314	601	139	175	0	0	203	203
04/01-03/31	11																	
04/01-03/31	22																	
03/01-02/28	277	0	162	0	281	0	277	301	277	277	162	305	181	230	0	0	277	277
04/01-03/31	8																	
04/01-03/31	7																	
03/01-02/28	82	0	122	0	182	0	82	102	82	82	122	136	50	63	0	0	82	82
04/01-03/31	6																	
04/01-03/31	14																	
12/20-02/19	25	26	43	169	56	231	25	31	25	25	43	68	25	25	0	0	25	25
04/01-03/31	2																	
04/01-03/31	2																	
05/01-06/03	130	0	125	35	166	47	130	162	130	125	125	213	0	0	0	0	130	130
04/01-03/31	3																	
04/01-03/31	2																	
06/06-11/05	495	0	614	729	918	1011	495	612	495	495	614	1209	322	399	0	0	495	495
04/01-03/31	16																	
04/01-03/31	17																	
06/01-08/31	48	49	56	7	80	10	48	59	48	48	56	108	32	32	0	0	48	48
04/01-03/31	2																	
04/01-03/31	2																	
06/01-07/16	517	2279	748	1665	1048	2389	517	631	517	517	748	1402	491	492	0	0	517	517
04/01-03/31	20																	
04/01-03/31	24																	
05/15-10/20																		
06/01-11/13	322	182	456	126	611	169	322	393	322	322	456	817	268	292	0	0	322	322
04/01-03/31	9																	
04/01-03/31	10																	
04/16-11/20	555	1482	779	2132	1046	2862	555	677	555	555	779	1276	334	356	0	0	555	555
04/01-11/30	16																	
12/01-03/31	62																	
04/01-03/31	36																	
03/01-02/28	93	0	68	76	108	133	93	118	93	93	68	118	61	78	0	0	93	93
04/01-03/31	2																	
04/01-03/31	2																	
06/01-11/01	340	1222	346	368	480	636	340	415	340	340	346	413	274	296	0	0	340	340
04/01-03/31	17																	
04/01-03/31	24																	
03/01-02/28	116	0	49	0	101	0	116	142	116	116	49	60	76	82	0	0	116	116
04/01-03/31	2																	
04/01-03/31	5																	
04/12-11/31	150	0	84	0	159	0	150	189	150	150	84	135	118	144	0	0	150	150
04/01-03/31	3																	
04/01-03/31	10																	
03/01-02/28	165	0	33	0	70	0	165	201	165	165	33	49	103	109	0	0	165	165
04/01-03/31	3																	
04/01-03/31	12																	
06/01-10/30	312	0	201	0	201	0	312	381	312	312	201	201	286	286	0	0	312	312
04/01-03/31	6																	
04/01-03/31	209																	
04/01-03/31	168																	
03/01-02/28	13	0	31	0	35	0	13	16	13	13	31	34	1	1	0	0	13	13
04/01-03/31	2																	
04/01-03/31	22																	
04/01-03/31	17																	

HAYRE RESOURCE AREA PROPOSED AMU'S CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			SLM	OTHER	SLM	OTHER	SLM	OTHER	SLM	OTHER	SLM	OTHER	SLM	OTHER	NO.	CLS
6412	Buckskin	P	1189.7	0	0	0	1129.0	0	29.8	0	0	0	30.9	0	11	CA
															2	AN
															8	DM
6414	North Birch	P	279.8	0	0	0	232.4	0	0	0	0	0	47.4	0	4	CA
															2	AN
															2	DM
6442	Nearas River One	P	680.1	0	0	0	168.1	0	397.2	0	0	0	114.8	0	15	CA
															1	AN
															3	DM
6443	Klondike	P	1276.2	0	0	0	699.1	0	339.2	0	0	0	237.9	0	19	CA
															2	AN
															9	DM
6444	Blue Lettuce	P	2432.7	0	0	0	1778.0	0	310.9	0	0	0	343.8	0	118	CA
															4	AN
															22	DM
6447	East Lonesome Lake	P	360.0	0	0	0	0	0	360.0	0	0	0	0	0	22	CA
															1	AN
															1	DM
6448	Christofferson	P	3263.7	0	0	0	3193.9	0	67.8	0	0	0	0	0	105	CA
															4	AN
															9	DM
6455	Haystack	P	2555.5	0	0	0	704.9	0	1850.6	0	0	0	0	0	88	CA
															4	AN
															8	DM
6463	Found	P	582.0	0	0	0	0	0	391.0	0	0	0	191.0	0	12	CA
															1	AN
															3	DM
6472	Wildhorse	P	513.0	0	0	0	0	0	498.0	0	0	0	15.0	0	27	CA
															4	AN
															2	DM
6493	Forgotten	P	1342.3	0	0	0	426.8	0	724.5	0	0	0	191.0	0	30	CA
															2	AN
															13	DM
Sub Total			134147	166937	1070	136	94453	131336	33323	26604	195	337	5104	8524		
Proposed AMU's (Not proposed in "B")																

SEASON OF USE	CURRENT ADM#		REC. STOCKING RATE/ADM#		POTEN. FORAGE PRODUCTION		ALTERNATIVE A RRNAN, COMBINED VEG. USGS		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LYST. FORAGE		ALTERNATIVE D ENHANCED WATERBAILDLIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BS	OTHER	BLV	OTHER	BLP	OTHER	ST	LY	ST	LY	ST	LY	ST	LY	ST	LY	ST	LY
	137	0	330	0	443	0	137	167	137	137	330	614	93	93	0	0	137	137
03/01-02/28	137																	
04/01-03/31	3																	
04/01-03/31	19																	
03/01-02/28	51	0	49	0	66	0	51	62	51	51	49	73	35	36	0	0	51	51
04/01-03/31	3																	
04/01-03/31	5																	
03/01-02/28	182	0	94	0	167	0	182	224	182	182	94	244	122	150	0	0	182	182
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	240	0	201	0	304	0	240	294	240	240	201	300	164	200	0	0	240	240
04/01-03/31	3																	
04/01-03/31	22																	
03/16-10/15	591	0	460	0	647	0	591	721	591	591	460	506	410	419	0	0	591	591
04/01-03/31	6																	
04/01-03/31	53																	
03/16-09/15	90	0	71	0	141	0	90	167	90	90	771	167	54	105	0	0	90	90
04/01-03/31	2																	
04/01-03/31	2																	
03/01-11/30	1132	0	1647	0	2216	0	1132	1381	1132	1381	1647	2536	922	922	0	0	1132	1132
04/01-03/31	6																	
04/01-03/31	22																	
03/01-02/28	1057	0	592	0	1068	0	1057	1390	1057	1057	592	1216	705	925	0	0	1057	1057
04/01-03/31	6																	
04/01-03/31	19																	
03/01-02/28	133	0	148	0	284	0	133	133	133	133	143	333	85	1130	0	0	133	133
04/01-03/31	2																	
04/01-03/31	7																	
06/01-09/30	108	0	134	0	263	0	108	194	108	108	134	238	81	138	0	0	108	108
04/01-03/31	6																	
04/01-03/31	5																	
03/01-02/28	358	0	125	106	180	212	358	437	358	358	125	230	238	242	0	0	358	358
04/01-03/31	3																	
04/01-03/31	31																	
Sub Total	28069	30293	32191	39763	47039	56598	28069	36933	28069	28069	32203	57637	20439	24735	0	0	28069	28069

RAVINE RESOURCE AREA PROPOSED ANPs IN ALTERNATIVE B (ALSO PROPOSED IN ALTERNATIVES A, C, D)

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNUSABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
6006	B Bar B	P	13365.0	14863.8	1048.0	42.9	5674.9	5940.8	6503.2	8880.1	138.9	0	0	0	1233	CA
															3	H
															16	AN
															33	DM
6020	L. Petrie Ranch	P	12998.2	5168.5	0	0	10200.4	3564.3	2788.4	1512.2	0	0	9.4	92.0	420	CA
															7	H
															138	CA
															100	CA
															100	CA
															200	CA
															373	CA
															200	CA
															573	CA
															51	AN
															23	DM
6069	Second Bend	P	1550.2	1103.4	0	0	325.2	447.6	1105.0	321.8	40.0	58.0	0	278.0	127	CA
															1	AN
															3	DM
6227	Chouteau Coulee	P	5171.2	6204.6	0	0	2728.0	4938.6	2443.2	1266.0	0	0	0	0	172	CA
															20	AN
															12	DM
6251	East Unit	P	3503.1	7725.9	953.6	519.9	1096.2	3464.8	1453.3	3741.2	0	0	0	0	350	CA
															15	AN
															11	DM
6355	Kevin	P	5080.7	0	0	0	870.6	0	2956.8	0	0	0	253.3	0	75	CA
															13	AN
															32	DM
6358	Beefsteak	P	2806.8	0	0	0	394.1	0	1763.2	0	12.9	0	636.6	0	30	CA
															7	AN
															16	DM
6362	Virden Lake	P	1040.5	0	0	0	0	0	673.4	0	319.6	0	47.5	0	38	CA
															3	AN
															8	DM
6378	Upper Maria	P	2680.7	0	0	0	50.5	0	2129.3	0	0	0	500.9	0	20	CA
															49	AN
															4	AN
															13	DM
6396	Maria Bridge	P	7796.0	1385.2	1039.3	262.2	589.1	84.3	4768.9	802.3	60.0	0	1338.7	236.4	326	CA
															3	AN
															8	AN
															54	DM
															11	ER
6398	Wald Eagle	P	1100.6	0	0	0	0	0	1100.6	0	0	0	0	0	25	CA
															2	AN
															12	DM
6399	Buffalo	P	9173.4	0	0	0	307.0	0	2650.7	0	75.3	0	140.4	0	89	CA
															4	AN
															29	DM
6434	Cabin	P	1745.8	0	0	0	70.9	0	1583.5	0	0	0	91.4	0	39	CA
															3	AN
															23	DM
6435	South Vinz	P	1015.7	0	0	0	0	0	860.8	0	0	0	154.9	0	108	CA
															1	AN
															9	DM
6439	Homestead Coulee	P	1479.1	0	0	0	0	0	1184.2	0	0	0	294.9	0	34	CA
															2	AN
															19	DM

SEASON OF USE	CURRENT ALTM		REC. STOCKING				POTEN. FORAGE		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
	BATH/ADMS		BATH/ADMS				PRODUCTION		ENHANC. COMBUSTION		CONT. OF		ENHANCED		ENHANCED		NO LIVESTOCK		NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
06/01-11/15	2960	3210	3253	3103	5050	5201	2960	3898	2960	3898	3253	6153	2346	2966	0	0	2960	2960		
04/01-03/31	85																			
04/01-03/31	79																			
08/22-10/31	2665	1006	3556	1228	5104	1825	2665	3251	2665	3251	3556	6587	2302	2426	0	0	2665	2665		
03/01-02/28																				
07/19-10/12																				
06/25-09/03																				
06/01-06/24																				
06/01-08/21																				
11/01-11/21																				
06/24-11/22																				
11/23-02/28																				
04/01-03/31	80																			
04/01-03/31	55																			
05/15-08/11	302	90	330	200	604	322	302	358	302	358	330	755	111	111	0	0	302	302		
04/01-03/31	2																			
04/01-03/31	7																			
05/01-11/15	693	291	1167	291	1829	2138	693	1109	693	1109	1167	2568	349	476	0	0	693	693		
04/01-03/31	32																			
04/01-03/31	29																			
05/01-10/27	793	1487	1010	1872	1386	2880	793	967	793	967	1010	1513	543	637	0	0	793	793		
04/01-03/31	24																			
04/01-03/31	26																			
03/01-02/28	909	0	837	0	1532	0	909	1099	909	1099	837	1413	601	604	0	0	909	909		
04/01-03/31	20																			
04/01-03/31	77																			
03/01-02/28	358	0	330	0	615	0	358	470	358	470	330	540	238	378	0	0	358	358		
04/01-03/31	11																			
04/01-03/31	38																			
09/01-11/30	455	0	112	0	262	0	455	555	455	555	112	163	455	486	0	0	455	455		
04/01-03/31	5																			
04/01-03/31	19																			
03/01-02/28	245	0	295	0	583	0	245	389	245	389	295	448	145	240	0	0	245	245		
12/01-03/31	26																			
04/01-03/31	4																			
04/01-03/31	31																			
03/01-02/28	1961	0	688	1221	1200	1822	1961	2979	1961	2979	688	1158	580	915	0	0	1961	1961		
04/01-11/30	3																			
12/01-03/31	4																			
04/01-03/31	130																			
04/01-03/31	92																			
03/01-02/28	301	0	168	0	335	0	301	367	301	367	168	332	198	198	0	0	301	301		
04/01-03/31	3																			
04/01-03/31	29																			
03/01-02/28	1070	0	344	253	676	458	1070	1343	1070	1343	344	664	696	876	0	0	1070	1070		
04/01-03/31	6																			
04/01-03/31	70																			
06/15-12/07	225	0	271	0	528	0	225	511	225	511	271	620	204	393	0	0	225	225		
04/01-03/31	5																			
04/01-03/31	55																			
10/29-12/19	95	0	122	0	243	0	95	219	95	219	122	253	95	176	0	0	95	95		
04/01-03/31	2																			
04/01-03/31	22																			
03/01-02/28	408	0	202	0	404	0	408	560	408	560	202	421	269	369	0	0	408	408		
04/01-03/31	3																			
04/01-03/31	46																			

HAVE RESOURCE AREA PROPOSED AMPs IN ALTERNATIVE B (ALSO PROPOSED IN ALTERNATIVES A, C, D) CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MCT STS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		CHAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
6446	None	P	1146.8	0	0	0	36.0	0	900.2	0	0	0	210.6	0	15	CA
															2	AN
															9	DM
6449	South Lonesome	P	1694.3	0	0	0	24.9	0	1669.4	0	0	0	0	0	75	CA
															4	AN
															7	DM
6450	Imman Well	P	1285.0	0	0	0	0	0	1285.0	0	0	0	0	0	55	CA
															2	AN
															5	DM
6451	Lonesome Well	P	2114.9	0	0	0	0	0	2114.9	0	0	0	0	0	41	CA
															3	AN
															6	DM
6452	Crass Seed	P	1092.9	0	0	0	0	0	1092.9	0	0	0	0	0	30	CA
															2	AN
															3	DM
6453	Hardware	P	434.9	0	0	0	0	0	434.9	0	0	0	0	0	14	CA
															1	AN
															1	DM
6470	Nagelbus	P	1641.8	0	0	0	177.0	0	1462.8	0	2.0	0	0	0	23	CA
															6	AN
															3	DM
6471	Wildhorse Lake	P	2610.0	0	0	0	0	0	2610.0	0	0	0	0	0	173	CA
															34	AN
															14	DM
6490	Viny Bench	P	1116.6	0	0	0	9.0	0	865.6	0	0	0	242.0	0	16	CA
															2	AN
															14	DM
Sub Total			77644	36453	3041	825	22554	18440	47480	16524	648	58	3921	606		

03/01-02/28	185	0	128	0	253	0	185	289	185	289	128	234	125	194	0	0	185	185
04/01-03/31	3																	
04/01-03/31	22																	
03/01-02/28	898	0	334	0	663	0	898	1243	898	1243	334	768	598	836	0	0	898	898
04/01-03/31	6																	
04/01-03/31	17																	
04/01-10/31	668	0	254	0	508	0	668	826	668	826	254	431	503	607	0	0	668	668
04/01-03/31	3																	
04/01-03/31	12																	
03/01-06/08	495	0	403	0	809	0	495	916	495	916	403	927	331	607	0	0	495	495
04/01-03/31	5																	
04/01-03/31	14																	
03/01-10/31	300	0	206	0	411	0	300	366	300	366	206	409	200	200	0	0	300	300
04/01-03/31	3																	
04/01-03/31	7																	
03/01-02/28	176	0	76	0	151	0	176	248	176	248	76	166	120	168	0	0	176	176
04/01-03/31	2																	
04/01-03/31	2																	
06/01-12/31	163	0	999	0	1164	0	163	317	163	317	999	800	140	362	0	0	163	163
04/01-03/31	9																	
04/01-03/31	7																	
06/01-09/30	691	0	737	0	1448	0	691	962	691	962	737	1053	518	697	0	0	691	691
04/01-03/31	34																	
04/01-03/31	34																	
03/01-02/28	193	0	114	0	227	0	193	291	193	291	114	210	129	194	0	0	193	193
04/01-03/31	3																	
04/01-03/31	34																	
Subtotal	17209	6084	15540	8168	25985	14638	17209	23533	17209	23533	15540	28608	11886	15106	0	0	17209	17209

HAYRE RESOURCE AREA EXISTING AMPs

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
6010	East Fork	E	2019.9	756.6	90.7	0	718.2	13.8	1211.0	646.8	0	0	0	96.0	103 AN 8 DM	
6011	Bennette Co.	E	3512.1	3813.2	169.3	18.0	2442.0	1730.3	900.6	2064.9	0	0	0	0	246 CA 15 AN 10 DM	
6012	Border	E	9108.8	12931.2	0	0	8710.1	12260.3	374.3	657.1	0	0	24.4	13.8	455 CA 40 AN 29 DM	
6014	Silver Bow	E	7899.9	3436.0	0	0	4464.5	2968.4	3435.4	467.6	0	0	0	0	104 CA 383 CA 106 CA 32 AN 15 DM	
6018	Nace	E	1994.1	400.0	0	0	1397.9	400.0	596.2	0	0	0	0	0	350 CA 8 AN 5 DM	
6022	Upper Woody Island	E	2478.5	179.6	0	0	1321.7	179.6	1156.8	0	0	0	0	0	101 CA 9 AN 4 DM	
6024	North Woody Island	E	1882.8	808.7	0	0	234.9	149.0	1647.9	659.7	0	0	0	0	91 CA 3 AN 4 DM	
6047	Mud Lake	E	2358.4	3252.1	0	0	1839.9	2651.3	417.6	281.0	100.9	319.8	0	0	200 CA 9 AN 4 DM	
6055	Lower Chouteau Coulee	E	1084.0	421.4	0	0	423.3	356.3	650.7	64.9	0	0	0	0	100 CA 4 AN 4 DM	
6062	Wood Coulee	E	12327.0	24476.2	0	0	11177.3	22067.1	702.3	1782.0	0	0	447.4	627.1	200 CA 80 CA 60 CA 113 CA 114 CA 118 CA 184 CA 88 CA 125 CA 112 CA 106 CA 126 CA 60 CA 48 AN 110 AN 42 DM	
6063	Wind Break	E	1275.1	679.0	0	0	1273.1	679.0	0	0	0	0	2.0	0	81 CA 5 AN 3 DM	
6067	Windmill	E	618.6	0	4.8	0	613.8	0	0	0	0	0	0	0	68 CA 3 AN 1 DM	
6071	Hanson Flat	E	3362.3	2000.5	0	0	2190.7	1677.8	1143.7	266.9	0	0	27.9	55.8	184 CA 13 AN 8 DM	
6074	Williams Bench	E	642.7	639.8	0	0	592.7	319.8	50.0	0	0	0	0	320.0	62 CA 4 AN 1 DM	
6075	Lohan Common	E	3578.6	1629.5	0	0	3184.5	996.9	391.8	628.4	0	0	2.3	4.2	258 CA 15 AN 11 DM	
6099	Eggin Common	E	5684.9	1934.5	0	0	4689.2	1401.3	958.5	476.6	0	0	37.2	56.6	305 CA 4 AN 23 DM	
6111	Zurich Bench	E	3081.9	2857.4	0	0	3038.4	2831.5	30.9	0	0	0	12.6	25.9	201 CA 12 AN 8 DM	
6115	Unit 11 Wood Coulee	E	160.0	379.5	0	0	137.0	369.4	18.0	2.0	0	0	5.0	8.1	125 CA 1 AN 3 DM	
6230	Horse Corral Coulee	E	2881.1	4534.7	0	0	2860.1	4096.8	20.9	432.7	0	0	0.1	5.2	180 CA 8 AN 5 DM	
6231	Fifteen Mile	E	1324.3	2576.6	0	0	1244.3	2796.6	0	178.0	0	0	0	0	190 CA 6 AN 4 DM	
6232	Thirty Mile	E	718.5	1472.6	0	0	718.5	1471.1	0	0	0	0	0	1.5	213 CA 4 AN 2 DM	
6243	Big Bend	E	590.2	459.6	0	0	370.4	459.6	0	0	219.8	0	0	0	39 CA 1 AN 1 DM	
Subtotal Existing AMPs			98784	70039	265	18	53932	59878	13707	8609	321	320	559	1214		

SEASON OF USE	CURRENT		REC. STOCKING RATE/ACRE	MUTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED REG. USES		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATER/ANIL/LIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION		
	BLM	OTHER		BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	
	ST	LT		ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	
04/01-11/30	624	133		497	119	799	236	624	803	624	803	497	879	341	460	0	0	
04/01-03/31	13															624	624	
04/01-03/31	14																	
05/01-12/15	1082	791	902	820	1292	1333	1082	1320	1082	1320	902	1631	781	829	0	0	1082	1082
04/01-03/31	24																	
04/01-03/31	24																	
05/10-03/31	2219	2625	2494	3519	3385	4793	2219	2707	2219	2707	2494	4609	1850	1963	0	0	2219	2219
04/01-03/31	63																	
04/01-03/31	70																	
05/24-11/03	1645	493	2085	963	3276	1351	1645	2127	1645	2127	2085	3861	966	1284	0	0	1645	1645
03/01-11/30																		
07/01-09/30																		
04/01-03/31																		
04/01-03/31																		
05/08-06/20	418	67	502	120	745	160	418	510	418	510	502	906	418	452	0	0	418	418
04/01-03/31	13																	
04/01-03/31	12																	
05/01-10/26	541	55	609	40	957	52	541	703	541	703	609	1180	353	460	0	0	541	541
04/01-03/31	14																	
04/01-03/31	10																	
05/10-11/05	523	141	400	172	748	332	523	836	523	836	400	865	401	608	0	0	523	523
04/01-03/31	5																	
04/01-03/31	10																	
05/15-10/31	672	768	767	756	1109	1129	672	820	672	820	767	1273	528	535	0	0	672	672
04/01-03/31	14																	
04/01-03/31	10																	
05/01-08/04	267	53	253	121	417	169	267	397	267	397	253	484	93	179	0	0	267	267
04/01-03/31	6																	
04/01-03/31	10																	
06/01-09/30	2225	4710	3029	6076	4142	8358	2225	2715	2225	2715	3029	5336	1693	1753	0	0	2225	2225
03/01-10/31																		
05/05-05/20																		
09/01-11/20																		
05/01-10/31																		
06/16-10/31																		
06/01-10/15																		
06/16-10/15																		
06/16-10/15																		
05/01-10/31																		
05/08-11/07																		
04/01-11/30	50																	
12/01-03/31	58																	
04/01-03/31	101																	
05/01-10/31	300	199	372	199	496	266	300	366	300	366	372	690	200	201	0	0	300	300
04/01-03/31	8																	
04/01-03/31	7																	
05/16-10/16	268	0	183	0	244	0	268	327	268	327	183	358	166	166	0	0	268	268
04/01-03/31	5																	
04/01-03/31	2																	
05/01-10/31	751	358	788	475	1182	667	751	916	751	916	788	1579	501	570	0	0	751	751
04/01-03/31	20																	
04/01-03/31	19																	
05/01-08/24	236	64	180	78	247	106	236	288	236	288	180	257	138	138	0	0	236	236
04/01-03/31	6																	
04/01-03/31	2																	
05/01-09/30	1075	400	920	371	1281	575	1075	1271	1075	1271	920	1784	559	559	0	0	1075	1075
04/01-03/31	24																	
04/01-03/31	26																	
05/01-10/31	1141	262	1549	461	2196	684	1141	1392	1141	1392	1549	2541	647	647	0	0	1141	1141
04/01-03/31	6																	
04/01-03/31	55																	
05/01-10/31	674	535	743	709	1006	953	674	821	674	821	743	1348	448	451	0	0	674	674
04/01-03/31	19																	
04/01-03/31	19																	
06/20-07/20	30	86	35	87	49	118	30	37	30	37	35	51	18	18	0	0	30	30
04/01-03/31	2																	
04/01-03/31	7																	
05/01-10/31	369	918	728	1097	982	1522	369	448	369	448	728	1380	263	281	0	0	369	369
04/01-03/31	13																	
04/01-03/31	12																	
06/01-10/31	325	624	372	726	501	997	325	397	325	397	372	769	260	261	0	0	325	325
04/01-03/31	9																	
04/01-03/31	10																	
04/10-06/16	176	294	180	403	243	541	176	215	176	215	180	326	176	176	0	0	176	176
04/01-03/31	6																	
04/01-03/31	5																	
05/01-09-14	180	84	129	135	223	180	180	220	180	220	129	154	100	109	0	0	180	180
04/01-03/31	2																	
04/01-03/31	2																	
Subtotal	15741	13662	17717	17447	25520	24522	15741	19638	15741	19638	17717	30061	10900	12100	0	0	15741	15741
A-29																		

HAYRE NON-AMPS

ALLDT. NO.	ALLOTMENT NAME	MOT STR	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
6002	Pebble Creek	N	159.3	0	0	0	135.9	0	0	0	0	0	23.4	0	3 1 1	AN DM
6003	Woodpile	N	79.8	645.6	0	0	0	0	79.8	308.5	0	0	0	337.1	1 1 1	CA AN DM
6004	Hendrickson	N	389.5	65.8	0	0	298.9	64.9	90.6	0.9	0	0	0	0	85 3 3	CA AN DM
6015	Lake	N	639.8	0	0	0	0	0	639.8	0	0	0	0	0	90 3 1	CA AN DM
6016	Woody Coulee	N	171.1	732.7	0	0	63.8	363.3	107.3	369.4	0	0	0	0	3 1 1	CA AN DM
6018	Rafter	N	159.6	159.5	0	0	44.7	159.5	114.9	0	0	0	0	0	2 3 1	CA AN DM
6023	Rifle Ranch	N	646.9	604.5	0	0	646.9	567.6	0	36.9	0	0	0	0	20 8 1	CA AN DM
6023	Big Flat	N	399.7	424.7	0	0	0	0	399.7	424.7	0	0	0	0	30 1 1	CA AN DM
6026	Border Line	N	592.9	0	0	0	322.9	0	270.0	0	0	0	0	0	50 1 1	CA AN DM
6028	Elloam	N	1237.8	6618.0	0	0	500.4	2896.6	737.4	3721.4	0	0	0	0	17 4 3	CA AN DM
6032	Old Creek	N	79.7	558.4	0	0	79.7	558.4	0	0	0	0	0	0	1 1 1	CA AN DM
6034	Stevens	N	488.8	968.4	0	0	488.8	232.4	0	0	0	0	0	736.0	7 2 1	CA AN DM
6036	Only Forty	N	39.9	613.8	0	0	39.9	613.8	0	0	0	0	0	0	3 1 1	CA AN DM
6038	Magda North	N	455.1	641.6	0	0	318.4	551.6	136.7	90.0	0	0	0	0	45 2 1	CA AN DM
6042	Red Top	N	167.7	0	0	0	114.8	0	52.9	0	0	0	0	0	9 1 1	CA AN DM
6044	Buckley Coulee	N	76.9	294.7	0	0	0	234.0	76.9	60.7	0	0	0	0	1 1 1	CA AN DM
6045	Turner	N	120.0	0	0	0	120.0	0	0	0	0	0	0	0	3 1 1	CA AN DM
6049	Chinook Reservoir	N	300.0	0	0	0	300.0	0	0	0	0	0	0	0	14 3 2	CA AN DM
6054	Skayen	N	333.6	68.7	0	0	90.9	0	242.7	68.7	0	0	0	0	57 1 1	CA AN DM
6059	Weigand Reservoir	N	255.1	0	0	0	255.1	0	0	0	0	0	0	0	130 2 1	CA AN DM
6061	Checker	N	864.1	196.0	0	0	541.2	196.0	308.9	0	0	0	14.0	0	75 3 2	CA AN DM
6064	Miller	N	369.4	1052.4	0	0	363.6	1047.2	0	0	0	0	5.8	5.2	48 2 2	CA AN DM
6065	Little Woody	N	450.0	0	0	0	450.0	0	0	0	0	0	0	0	100 2 1	CA AN DM
6068	Killes	N	490.5	400.0	0	0	490.6	162.0	0	0	0	0	0	238.0	30 2 1	CA AN DM
6070	Worth Jewel	N	942.4	1834.7	0	0	901.0	1380.5	0	0	0	0	41.4	454.2	69 2 1	CA AN DM
6073	Worth Red Rock	N	416.0	3550.6	0	0	368.5	1970.9	27.9	1313.7	0	0	19.6	266.0	7 2 2	CA AN DM

SEASON OF USE	CURRENT BLT	ALTM OTHER	REC-STOCKING		POTEN. FORAGE		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
			RATE/ALTM		PRODUCTION		ENHANC. COMBINED		CORT. OF		ENHANCED		ENHANCED		NO LIVESTOCK		NO ACTION	
			ST	OTHR	BLT	OTHR	ST	OTHR	ST	OTHR	ST	OTHR	ST	OTHR	ST	OTHR	ST	OTHR
03/01-02/28	30																	
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	16	128	14	32	29	103	16	16	16	16	14	14	16	16	0	0	16	16
04/01-03/31	2																	
04/01-03/31	2																	
09/01-08/28	68	13	116	17	163	22	68	68	68	68	116	116	68	68	0	0	68	68
04/01-03/31	5																	
04/01-03/31	7																	
05/01-06/25	164		126	0	252	0	164	164	164	164	126	126	164	164	0	0	164	164
04/01-03/31	5																	
04/01-03/31	2																	
03/01-02/28	40	156	37	184	63	289	40	40	40	40	37	37	40	40	0	0	40	40
04/01-03/31	2																	
04/01-03/31	2																	
05/01-10/30	10	29	45	45	75	60	10	10	10	10	45	45	10	10	0	0	10	10
04/01-03/31	5																	
04/01-03/31	2																	
04/16-12/09	130	144	189	174	252	237	130	130	130	130	189	189	130	130	0	0	130	130
04/16-10/30																		
04/01-03/31	2																	
04/01-03/31	2																	
05/20-09/29	67	63	78	87	156	173	67	67	67	67	78	78	67	67	0	0	67	67
04/01-03/31	2																	
04/01-03/31	2																	
05/01-09/13	185	0	150	0	236	0	185	185	185	185	150	150	185	185	0	0	185	185
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	205	0	258	1487	426	2397	205	205	205	205	258	258	205	205	0	0	205	205
04/01-03/31	5																	
04/01-03/31	7																	
03/01-02/28	17	99	30	150	39	201	17	17	17	17	30	30	17	17	0	0	17	17
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	91	67	134	64	180	86	91	91	91	91	134	134	91	91	0	0	91	91
04/01-03/31	3																	
04/01-03/31	2																	
12/01-02/28	9	0	12	172	16	230	9	9	9	9	12	12	9	9	0	0	9	9
04/01-03/31	2																	
04/01-03/31	2																	
05/16-10/18	95	134	105	147	157	209	95	95	95	95	105	105	95	95	0	0	95	95
04/01-03/31	3																	
04/01-03/31	2																	
05/01-09/30	45	0	52	0	52	0	45	45	45	45	52	52	45	45	0	0	45	45
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	13	0	14	82	29	117	13	13	13	13	14	14	13	13	0	0	13	13
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	32	0	36	0	36	0	32	32	32	32	36	36	32	32	0	0	32	32
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	86	0	73	0	73	0	86	86	86	86	73	73	86	86	0	0	86	86
04/01-03/31	5																	
04/01-03/31	5																	
05/01-06/20	77	15	69	11	122	22	77	77	77	77	69	69	77	77	0	0	77	77
04/01-03/31	2																	
04/01-03/31	2																	
12/01-12/25	103	7	64	0	86	0	103	103	103	103	64	64	103	103	0	0	103	103
04/01-03/31	3																	
04/01-03/31	2																	
06/15-08/05	144	111	213	50	325	66	144	144	144	144	213	213	144	144	0	0	144	144
04/01-03/31	5																	
04/01-03/31	5																	
05/01-10/15	76	187	90	264	121	354	76	76	76	76	90	90	76	76	0	0	76	76
04/01-03/31	3																	
04/01-03/31	5																	
05/01-05/25	77	0	125	0	168	0	77	77	77	77	125	125	77	77	0	0	77	77
04/01-03/31	3																	
04/01-03/31	2																	
06/01-09/15	117	0	138	49	185	65	117	117	117	117	138	138	117	117	0	0	117	117
04/01-03/31	3																	
04/01-03/31	2																	
05/01-12/03	173	441	228	374	305	501	173	173	173	173	228	228	173	173	0	0	173	173
04/01-03/31	2																	
04/01-03/31	10																	
03/01-02/28	80	0	100	772	139	1197	80	80	80	80	100	100	80	80	0	0	80	80
04/01-03/31	3																	
04/01-03/31	4																	

HAYRE NDR-AMPS CONTINUED

ALLOT. NO.	ALLOTMENT NAME	NOT SIS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANTHRA	
			B-M	OTHER	B-M	OTHER	B-M	OTHER	B-M	OTHER	B-M	OTHER	B-M	OTHER	NO.	CLS
6076	Fridgesen Lease	N	319.7	0	0	0	319.7	0	0	0	0	0	0	0	43	CA
															1	AN
															1	DN
6077	North	N	479.8	0	0	0	479.8	0	0	0	0	0	0	0	40	CA
															2	AN
															2	DN
6078	Lodge Creek	N	252.9	968.3	0	0	193.3	814.3	57.9	153.0	0	0	1.5	1.2	3	CA
															1	AN
															1	DN
6079	East	N	394.2	677.0	0	0	391.6	669.9	0	0	0	0	2.6	7.1	80	CA
															1	AN
															1	DN
6080	West	N	605.6	34.0	0	0	605.6	34.0	0	0	0	0	0	0	60	CA
															2	AN
															1	DN
6081	Siemens	N	40.0	673.3	0	0	38.0	328.1	0	176.4	0	0	2.0	168.8	1	CA
															1	AN
															1	DN
6082	Rabbit Hills	N	213.8	244.6	0	0	165.2	244.2	43.7	0	0	0	4.9	0.4	15	CA
															1	AN
															10	AN
															1	DN
6084	Andy Reservoir	N	436.4	0	0	0	56.5	0	319.3	0	0	0	60.6	0	5	CA
															3	AN
															4	DN
6085	Coal Coulee	N	642.3	0	0	0	78.8	0	563.7	0	0	0	0	0	27	CA
															1	AN
															1	DN
6089	Pond Coulee	N	479.6	465.3	0	0	479.6	465.3	0	0	0	0	0	0	64	CA
															2	AN
															1	DN
6093	Half Loaf	N	312.9	0	0	0	312.9	0	0	0	0	0	0	0	40	CA
															1	AN
															1	DN
6094	Triangle	N	513.7	899.4	0	0	193.8	772.7	319.4	126.7	0	0	0.3	0	70	CA
															2	AN
															1	DN
6096	West Fork	N	876.8	912.6	0	0	875.5	907.9	0	0	0	0	1.3	4.7	155	CA
															3	AN
															2	DN
6097	Wayne Creek	N	2320.6	29.7	0	0	2319.8	29.7	0	0	0	0	0.8	0	80	CA
															9	AN
															4	DN
6098	Buck Shot	N	1710.3	1878.2	112.9	0	1597.4	1878.2	0	0	0	0	0	0	123	CA
															6	AN
															3	DN
6100	Big EL	N	639.6	0	0	0	467.8	0	48.9	0	122.9	0	0	0	17	CA
															3	AN
															1	DN
6102	School House	N	320.0	56.0	0	0	0	0	320.0	56.0	0	0	0	0	30	CA
															1	AN
															1	DN
6104	Step Light	N	40.0	0	0	0	0	0	40.0	0	0	0	0	0	1	CA
															1	AN
															1	DN
6106	Second	N	159.6	2099.9	0	0	159.6	2099.9	0	0	0	0	0	0	11	CA
															1	AN
															1	DN
6108	County Line	N	20.0	0	0	0	20.0	0	0	0	0	0	0	0	1	CA
															1	AN
															1	DN
6109	Miles Butte	N	599.5	0	0	0	376.4	0	141.4	0	0	0	81.8	0	10	CA
															1	AN
															5	DN
6110	Nononbre	N	638.8	0	0	0	160.7	0	478.1	0	0	0	0	0	70	CA
															3	AN
															1	DN

SEASON OF USE	CURRENT		AUMs	REG. STOCKING		POTEN. FORAGE PRODUCTION	ALTERNATIVE A ENHANCED VEG. USES		ALTERNATIVE B CONT. OF PRESENT NGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATERWILL/LIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION		
	BLM	OTHER		RAT/ AUMs	BLM		OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT		
	BLM	OTHER		BLM	OTHER		ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	
05/01-06/15	64	0		93	0	126	0	64	64	64	64	95	95	64	64	0	0	64	64
04/01-03/31	2																		
04/01-03/31	2																		
05/01-07/23	111	0	134	0	134	0	111	111	111	111	134	134	111	111	0	0	111	111	
04/01-03/31	3																		
04/01-03/31	5																		
03/01-02/28	35	225	86	247	121	348	35	35	35	35	86	86	35	35	0	0	35	35	
04/01-03/31	2																		
04/01-03/31	2																		
07/01-08/10	39	65	97	167	130	223	39	39	39	39	97	97	39	39	0	0	39	39	
04/01-03/31	2																		
04/01-03/31	2																		
05/01-06/30	119	0	180	10	241	13	119	119	119	119	180	180	119	119	0	0	119	119	
04/01-03/31	3																		
04/01-03/31	2																		
05/01-09/30	5	0	8	129	11	190	5	5	5	5	8	8	5	5	0	0	5	5	
04/01-03/31	2																		
04/01-03/31	2																		
05/15-10/23	34	46	39	59	57	80	34	34	34	34	39	39	34	34	0	0	34	34	
04/01-11/31	1																		
12/01-03/31	5																		
04/01-03/31	2																		
03/01-02/28	58	0	103	0	192	0	58	58	58	58	103	103	58	58	0	0	58	58	
04/01-03/31	5																		
04/01-03/31	10																		
05/10-10/20	147	0	117	0	221	0	147	147	147	147	117	117	147	147	0	0	147	147	
04/01-03/31	5																		
04/01-03/31	2																		
06/15-09/14	97	98	121	117	162	158	97	97	97	97	121	121	97	97	0	0	97	97	
04/01-03/31	3																		
04/01-03/31	2																		
05/01-06/30	80	0	94	0	125	0	80	80	80	80	94	94	80	80	0	0	80	80	
04/01-03/31	2																		
04/01-03/31	2																		
05/01-08/20	122	135	102	223	172	313	122	122	122	122	102	102	122	122	0	0	122	122	
04/01-03/31	3																		
04/01-03/31	2																		
08/22-10/31	177	185	244	229	327	308	177	177	177	177	244	244	177	177	0	0	177	177	
04/01-03/31	5																		
04/01-03/31	5																		
03/01-02/28	486	0	652	9	873	12	486	486	486	486	652	652	486	486	0	0	486	486	
04/01-03/31	14																		
04/01-03/31	10																		
05/15-10/30	332	365	573	674	751	898	332	332	332	332	573	573	332	332	0	0	332	332	
04/01-03/31	9																		
04/01-03/31	7																		
03/01-02/28	198	0	162	0	256	0	198	198	198	198	162	162	198	198	0	0	198	198	
04/01-03/31	5																		
04/01-03/31	2																		
05/01-07/31	78	11	67	11	133	22	78	78	78	78	67	67	78	78	0	0	78	78	
04/01-03/31	2																		
04/01-03/31	2																		
05/01-10/01	9	0	8	0	16	0	9	9	9	9	8	8	9	9	0	0	9	9	
04/01-03/31	2																		
04/01-03/31	2																		
10/01-12/31	34	0	48	668	64	891	34	34	34	34	48	48	34	34	0	0	34	34	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	4	0	6	0	8	0	4	4	4	4	6	6	4	4	0	0	4	4	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	115	0	197	0	284	0	115	115	115	115	197	197	115	115	0	0	115	115	
04/01-03/31	2																		
04/01-03/31	12																		
08/21-10/21	143	0	152	0	259	0	143	143	143	143	152	152	143	143	0	0	143	143	
04/01-03/31	5																		
04/01-03/31	2																		
04/01-03/31	2																		

HAYRE NON-AMPS CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MCT STS	ACRES		EXISTENT		GOOD		RANGE CONDITION		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
6112	Unasaca	N	36.0	656.0	0	0	36.0	655.7	0	0	0	0	0	0.3	1	CA AN DM
6113	Zurich Park	N	130.9	89.7	0	0	130.9	89.7	0	0	0	0	0	0	1	CA AN DM
6114	Harvey	N	457.7	482.6	0	0	277.3	430.8	26.1	24.0	0	0	154.3	27.8	40	CA AN AR DM
6116	Rodeo	N	748.3	576.5	0	0	619.5	444.0	57.9	127.0	0	0	70.9	5.5	49	CA AN AR DM
6117	Siphon	N	152.7	408.0	0	0	28.9	199.4	118.1	198.8	0	0	5.7	9.8	2	CA AN DM
6118	Colony	N	189.7	253.7	0	0	124.7	21.8	4.0	84.9	0	0	71.0	147.0	4	CA AN DM
6124	Harlem	N	520.9	478.4	0	0	456.4	441.5	0	0	0	0	64.5	36.9	6	CA AN DM
6128	Peat	N	50.0	0	0	0	50.0	0	0	0	0	0	0	0	40	CA AN DM
6127	Repeat	N	141.0	234.0	0	0	141.0	234.0	0	0	0	0	0	0	176	CA AN DM
6128	Lateral	N	159.8	638.7	0	0	123.5	281.7	34.9	352.5	0	0	1.4	4.5	2	CA AN DM
6130	Savoy Creek	N	431.3	1559.8	0	0	351.8	1076.9	53.3	365.0	0	0	26.2	117.9	351	CA AN DM
6138	Merford	N	39.6	0	0	0	17.9	0	19.8	0	0	0	1.9	0	1	CA AN DM
6139	Bowes Field	N	158.4	0	0	0	99.4	0	38.7	0	0	0	20.3	0	2	CA AN DM
6140	Pipeline	N	159.7	0	0	0	0	0	126.1	0	0	0	33.6	0	2	CA AN DM
6141	Miles Creek	N	119.5	0	0	0	107.7	0	6.9	0	0	0	4.9	0	4	CA AN DM
6142	South Maple	N	39.7	0	0	0	16.0	0	23.4	0	0	0	0.3	0	2	CA AN DM
6143	Farm	N	79.8	0	0	0	25.8	0	51.6	0	0	0	2.4	0	2	CA AN DM
6144	County Road	N	392.7	0	0	0	277.2	0	113.3	0	0	0	2.2	0	8	CA AN DM
6145	Black Coulee	N	119.7	0	0	0	115.6	0	0	0	0	0	4.1	0	2	CA AN DM
6146	North Park	N	39.8	0	0	0	38.9	0	0	0	0	0	0.9	0	1	CA AN DM
6147	Big Coulee	N	39.8	0	0	0	14.0	0	25.8	0	0	0	0	0	1	CA AN DM
6148	Mule Talk	N	40.0	0	0	0	0	0	38.0	0	0	0	2.0	0	1	CA AN DM
6149	Timber Butte	N	39.9	0	0	0	0	0	36.9	0	0	0	3.0	0	1	CA AN DM
6150	Corrigan Mountain	N	119.8	0	0	0	68.4	0	34.4	0	0	0	17.0	0	3	CA AN DM
6152	Gap Creek	N	79.7	0	0	0	79.7	0	0	0	0	0	0	0	2	CA AN DM

SEASON OF USE	CURRENT AUMS		REC. STOCKING RATE/AUMS		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COW/NO		ALTERNATIVE B CONC. OF PRESENT MGMT.		ALTERNATIVE C ENHANC. COW/NO		ALTERNATIVE D ENHANC. COW/NO		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION		
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	
03/01-10/30	6	371			13	224													
04/01-03/31	2						6		6								6	6	
04/01-03/31	2																		
03/01-02/28	15		0	40	27	53	36	15	15	15	15	40	40	15	15	0	0	15	15
04/01-03/31	2																		
04/01-03/31	2																		
09/16-10/15	53	39	70	113	95	152	53	53	53	53	70	70	53	53	0	0	53	53	
04/01-11/30	2																		
12/01-03/31	10																		
04/01-03/31	5																		
05/01-09/15	108	91	145	126	197	176	108	108	108	108	145	145	108	108	0	0	108	108	
04/01-11/30	3																		
12/01-03/31	10																		
04/01-03/31	7																		
03/01-02/28	28	81	23	78	42	125	28	28	28	28	23	23	28	28	0	0	28	28	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	46	16	37	25	50	45	46	46	46	46	37	37	46	46	0	0	46	46	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	71	103	99	114	134	153	71	71	71	71	99	99	71	71	0	0	71	71	
04/01-03/31	3																		
04/01-03/31	5																		
10/10-12/09	80	0	80	0	10	0	80	80	80	80	80	80	80	80	0	0	80	80	
04/01-03/31	2																		
04/01-03/31	2																		
05/10-05/24	15	0	89	212	119	282	15	15	15	15	89	89	15	15	0	0	15	15	
04/01-03/31	2																		
04/01-03/31	2																		
05/01-12/31	16	0	42	133	60	221	16	16	16	16	42	42	16	16	0	0	16	16	
04/01-03/31	2																		
04/01-03/31	2																		
11/21-12/03	79	84	105	357	146	520	79	79	79	79	105	105	79	79	0	0	79	79	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	12	0	9	0	14	0	12	12	12	12	9	9	12	12	0	0	12	12	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	28	0	33	0	49	0	28	28	28	28	33	33	28	28	0	0	28	28	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	26	0	23	0	45	0	26	26	26	26	23	23	26	26	0	0	26	26	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	48	0	27	0	37	0	48	48	48	48	27	27	48	48	0	0	48	48	
04/01-03/31	2																		
04/01-03/31	2																		
06/01-10/31	10	0	9	0	14	0	10	10	10	10	9	9	10	10	0	0	10	10	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-09/31	14	0	17	0	28	0	14	14	14	14	17	17	14	14	0	0	14	14	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	92	0	153	0	232	0	92	92	92	92	153	153	92	92	0	0	92	92	
04/01-03/31	3																		
04/01-03/31	2																		
03/01-02/28	23	0	29	0	39	0	23	23	23	23	29	29	23	23	0	0	23	23	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	10	0	10	0	14	0	10	10	10	10	10	10	10	10	0	0	10	10	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	8	0	10	0	16	0	8	8	8	8	10	10	8	8	0	0	8	8	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	9	0	11	0	22	0	9	9	9	9	11	11	9	9	0	0	9	9	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	9	0	11	0	22	0	9	9	9	9	11	11	9	9	0	0	9	9	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	33	0	44	0	66	0	33	33	33	33	44	44	33	33	0	0	33	33	
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	21	0	34	0	45	0	21	21	21	21	34	34	21	21	0	0	21	21	
04/01-03/31	3																		
04/01-03/31	5																		

HAYRE NON-AMPA CONTINUED

ALLOT. NO.	ALLOTMENT NAME	WMT STS H	ACRES		EXCLUDED		CUBS		RANGE CONDITION		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CL.
6170	Molker		199.7	0	0	0	133.3	0	27.6	0	0	0	38.6	0	3	CA 1 AN 1 DM
6174	Bench Mark	N	239.5	0	0	0	48.0	0	148.9	0	0	0	42.6	0	3	CA 1 AN 2 DM
6177	Black Fork	N	201.4	0	0	0	48.3	0	127.0	0	0	0	26.1	0	3	CA 1 AN 2 DM
6178	Lightning	N	159.8	0	0	0	97.0	0	47.3	0	0	0	15.5	0	38	CA 2 AN 1 DM
6180	Bullseye	N	39.9	0	0	0	17.0	0	22.9	0	0	0	0	0	1	CA 1 AN 1 DM
6183	Birch Creek	N	40.0	0	0	0	0	0	40.0	0	0	0	0	0	1	CA 1 AN 1 DM
6187	Northeast Fork	N	519.4	0	0	0	23.2	0	480.2	0	0	0	16.0	0	100	CA 3 AN 2 DM
6189	Mineral	N	124.9	0	0	0	0	0	105.6	0	0	0	19.3	0	5	CA 1 AN 2 DM
6190	Oliver	N	240.4	0	0	0	63.3	0	164.6	0	0	0	12.5	0	3	CA 1 AN 1 DM
6207	Ragland Bench	N	69.9	0	0	0	28.9	0	37.5	0	0	0	3.5	0	3	CA 1 AN 1 DM
6220	Eight Mile Bench	N	319.1	0	0	0	284.3	0	14.0	0	0	0	20.8	0	8	CA 1 AN 3 DM
6223	Husar Homestead	N	119.7	0	0	0	0	0	65.6	0	0	0	54.1	0	1	CA 1 AN 1 DM
6226	Big FM	N	310.2	1823.1	0	0	396.9	1688.1	0	124.6	0	0	3.3	10.4	55	CA 1 AN 1 DM
6237	Holding Pasture	N	193.1	0	0	0	193.1	0	0	0	0	0	0	0	3	CA 1 AN 1 DM
6238	Highway	N	364.5	26.9	0	0	362.5	26.9	0	0	0	0	2.0	0	4	CA 1 AN 1 DM
* 6241	Pueblo	N	79.8	265.2	0	0	76.9	259.8	0	0	0	0	2.9	5.4	1	CA 1 AN 1 DM
6242	Waylee	N	282.7	589.2	0	0	113.9	368.4	166.8	210.9	0	0	2.0	9.9	4	CA 1 AN 1 DM
6245	Stirrup	N	215.7	12.9	0	0	215.7	12.9	0	0	0	0	0	0	80	CA 1 AN 1 DM
6246	Maddish Base	N	40.0	178.4	0	0	40.0	157.5	0	20.9	0	0	0	0	4	CA 1 AN 1 DM
6247	West Wildhorse	N	113.8	0	0	0	103.8	0	0	0	0	0	10.0	0	8	CA 1 AN 1 DM
6248	Grove	N	40.9	0	0	0	40.9	0	0	0	0	0	0	0	1	CA 2 AN 1 DM
6250	Milk River	N	158.0	0	0	0	0	0	125.0	0	0	0	33.0	0	5	CA 1 AN 1 DM
6252	Valley Place	N	40.0	0	0	0	0	0	40.0	0	0	0	0	0	1	CA 1 AN 1 DM
6253	Fifty/Fifty	N	78.8	0	0	0	78.8	0	0	0	0	0	0	0	1	CA 1 AN 1 DM
6254	Lost Bird	N	40.0	0	0	0	33.5	0	0	0	0	0	6.5	0	1	CA 1 AN 1 DM

SEASON OF USE	CURRENT		ACRES	REC. STOCKING		POTEN. PORACE		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
	BLM			RATE/ACRE		PRODUCTION		ENHANC. COMBINED		CONT. OF PRESENT MGMT.		ENHANCED LIVST. PORACE		ENHANCED WATER/WILDLIFE		NO LIVESTOCK GRAZING		NO ACTION	
	ST	LT		BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	40	2		15	0	21	0	40	40	40	40	15	15	40	40	0	0	40	40
04/01-03/31	2	2																	
03/01-02/28	35	2	0	40	0	71	0	35	35	35	35	40	40	35	35	0	0	35	35
04/01-03/31	2	2																	
03/01-02/28	39	2	0	44	0	77	0	39	39	39	39	44	44	39	39	0	0	39	39
04/01-03/31	2	2																	
03/01-02/28	29	2	429	34	0	51	0	29	29	29	29	34	34	29	29	0	0	29	29
04/01-11/31	3	2																	
04/01-03/31	2	2																	
03/01-02/28	5	2	0	11	0	17	0	5	5	5	5	11	11	5	5	0	0	5	5
04/01-03/31	2	2																	
03/01-02/28	10	2	0	7	0	13	0	10	10	10	10	7	7	10	10	0	0	10	10
04/01-03/31	2	2																	
07/16-11/15	78	334	84	0	156	0	78	78	78	78	84	84	78	78	0	0	78	78	
04/01-03/31	5	5																	
03/01-08/15	25	120	14	0	28	0	25	25	25	25	14	14	25	25	0	0	25	25	
04/01-03/31	2	2																	
03/01-02/28	36	2	0	40	0	69	0	36	36	36	36	40	40	36	36	0	0	36	36
04/01-03/31	2	2																	
10/06-02/05	13	2	0	13	0	22	0	13	13	13	13	13	13	13	13	0	0	13	13
04/01-03/31	2	2																	
03/01-02/28	150	2	0	78	0	106	0	150	150	150	150	78	78	150	150	0	0	150	150
04/01-03/31	7	7																	
03/01-02/28	7	2	0	12	0	24	0	7	7	7	7	12	12	7	7	0	0	7	7
04/01-03/31	2	2																	
06/01-08/16	60	2	0	74	0	99	0	60	60	60	60	74	74	60	60	0	0	60	60
04/01-03/31	2	2																	
03/01-02/28	35	2	0	81	0	108	0	35	35	35	35	81	81	35	35	0	0	35	35
04/01-03/31	2	2																	
07/01-09/01	65	16	92	0	123	0	65	65	65	65	92	92	65	65	0	0	65	65	
04/01-03/31	2	2																	
03/01-02/28	9	2	0	17	39	23	80	9	9	9	9	17	17	9	9	0	0	9	9
04/01-03/31	2	2																	
03/01-02/28	9	2	0	9	9	222	9	9	9	9	9	9	9	9	9	0	0	9	9
04/01-03/31	2	2																	
11/04-11/18	40	2	0	57	3	77	4	40	40	40	40	57	57	40	40	0	0	40	40
04/01-03/31	2	2																	
03/01-05/01	8	2	0	10	46	13	64	8	8	8	8	10	10	8	8	0	0	8	8
04/01-03/31	2	2																	
06/01-09/30	32	108	29	0	39	0	32	32	32	32	29	29	32	32	0	0	32	32	
04/01-11/30	2	2																	
03/01-02/28	6	2	0	11	0	14	0	6	6	6	6	11	11	6	6	0	0	6	6
04/01-03/31	3	2																	
03/01-02/28	35	2	0	25	0	50	0	35	35	35	35	25	25	35	35	0	0	35	35
04/01-03/31	2	2																	
03/01-02/28	6	2	0	8	0	17	0	6	6	6	6	8	8	6	6	0	0	6	6
04/01-03/31	2	2																	
03/01-02/28	16	2	0	23	0	31	0	16	16	16	16	23	23	16	16	0	0	16	16
04/01-03/31	2	2																	
03/01-02/28	8	2	0	6	0	9	0	8	8	8	8	6	6	8	8	0	0	8	8
04/01-03/31	2	2																	

HAYRE NON-AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION		POOR		UNSUITABLE		GRADING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CL
6293	Whitlash	N	538.9	0	0	0	0	0	274.9	0	0	0	264.0	0	23	CA
															4	AN
															1	AN
															27	DM
6301	North Snake	N	171.8	0	0	0	129.5	0	30.2	0	0	0	12.1	0	45	CA
															1	AN
															1	DM
6303	River Run	N	39.7	0	0	0	38.3	0	0	0	0	0	1.4	0	1	CA
															1	AN
															1	DM
6339	Sullivan Bridge	N	275.0	0	0	0	241.7	0	0	0	0	0	33.3	0	8	CA
															1	AN
															5	DM
6340	Cactus Flat	N	583.3	0	0	0	10.4	0	465.2	0	16.7	0	91.0	0	17	CA
															1	AN
															9	DM
6341	Major	N	8.0	0	0	0	0	0	8.0	0	0	0	0	0	1	CA
															1	AN
															1	DM
6351	Halvorsen	N	39.9	0	0	0	39.9	0	0	0	0	0	0	0	1	CA
															1	AN
															1	DM
6352	Dahlen	N	159.8	0	0	0	0	0	159.8	0	0	0	0	0	3	CA
															1	AN
															1	DM
6353	Bench	N	317.8	0	0	0	0	0	298.8	0	0	0	19.0	0	5	CA
															1	AN
															2	DM
6354	Anticline	N	639.7	0	0	0	0	0	388.2	0	0	0	251.5	0	14	CA
															1	AN
															4	DM
6357	Skryja	N	79.8	0	0	0	0	0	29.6	0	46.9	0	3.3	0	3	CA
															1	AN
															1	DM
6359	Rimrock	N	403.8	0	0	0	217.8	0	6.9	0	0	0	178.1	0	10	CA
															1	AN
															2	DM
6361	Gordon	N	250.5	0	0	0	6.6	0	235.7	0	0	0	8.2	0	4	CA
															1	AN
															2	DM
6363	Open Flat	N	559.4	0	0	0	0	0	409.3	0	42.0	0	108.1	0	15	CA
															1	AN
															3	DM
6365	Hasquet	N	119.8	0	0	0	0	0	109.9	0	0	0	9.9	0	2	CA
															1	AN
															1	DM
6367	Big Deep	N	867.4	0	0	0	11.0	0	693.3	0	0	0	143.1	0	14	CA
															1	AN
															13	DM
6368	Parker	N	158.9	0	0	0	0	0	134.1	0	0	0	24.8	0	4	CA
															1	AN
															2	DM
6369	Wood Duck	N	186.7	0	0	0	0	0	151.4	0	0	0	35.3	0	3	CA
															1	AN
															3	DM
6370	Red Gear	N	495.6	0	0	0	427.6	0	0	0	0	0	68.0	0	9	CA
															1	AN
															7	DM
6371	Bounty	N	199.8	0	0	0	177.8	0	0	0	0	0	22.0	0	9	CA
															1	AN
															4	DM
6372	Hurley	N	13.0	0	0	0	0	0	13.0	0	0	0	0	0	6	CA
															1	AN
															1	DM
6373	Ollmont	N	486.6	0	0	0	158.7	0	211.9	0	85.4	0	30.6	0	12	CA
															2	AN
															1	DM

SEASON OF USE	CURRENT ALMA		REC. STOCKING RATE/ALMA		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED VEG. USES		ALTERNATIVE B COMB. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATERWILDLIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLT	OTHER	BLT	OTHER	BLT	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
	75	0	75	0	148	0	75	75	75	75	75	75	75	75	0	0	75	75
06/01-08/31	2																	
12/01-03/31	2																	
04/01-11/30	1																	
04/01-03/31	65																	
07/16-08/15	45	0	32	0	47	0	45	45	45	45	32	32	45	45	0	0	45	45
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	9	0	12	0	16	0	9	9	9	9	12	12	9	9	0	0	9	9
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	95	0	66	0	89	0	95	95	95	95	66	66	95	95	0	0	95	95
04/01-03/31	12																	
04/01-03/31	12																	
03/01-02/28	203	0	75	0	150	0	203	203	203	203	75	75	203	203	0	0	203	203
04/01-03/31	2																	
04/01-03/31	22																	
03/01-02/28	2	0	2	0	5	0	2	2	2	2	2	2	2	2	0	0	2	2
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	14	0	13	0	18	0	14	14	14	14	13	13	14	14	0	0	14	14
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	36	0	20	0	40	0	36	36	36	36	20	20	36	36	0	0	36	36
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	62	0	50	0	101	0	62	62	62	62	50	50	62	62	0	0	62	62
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	171	0	57	0	113	0	171	171	171	171	57	57	171	171	0	0	171	171
04/01-03/31	2																	
04/01-03/31	10																	
04/01-09/15	15	0	7	0	19	0	15	15	15	15	7	7	15	15	0	0	15	15
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	125	0	63	0	84	0	125	125	125	125	63	63	125	125	0	0	125	125
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	53	0	31	0	60	0	53	53	53	53	31	31	53	53	0	0	53	53
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/25	187	0	55	0	116	0	187	187	187	187	55	55	187	187	0	0	187	187
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	23	0	16	0	32	0	25	25	25	25	16	16	25	25	0	0	25	25
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	167	0	108	0	214	0	167	167	167	167	108	108	167	167	0	0	167	167
04/01-03/31	2																	
04/01-03/31	31																	
05/01-11/30	28	0	20	0	40	0	28	28	28	28	20	20	28	28	0	0	28	28
04/01-03/31	2																	
04/01-03/31	5																	
05/28-02/29	37	0	23	0	45	0	37	37	37	37	23	23	37	37	0	0	37	37
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	107	0	103	0	140	0	107	107	107	107	103	103	107	107	0	0	107	107
04/01-03/31	2																	
04/01-03/31	17																	
03/01-02/28	75	0	44	0	59	0	75	75	75	75	44	44	75	75	0	0	75	75
04/01-03/31	2																	
04/01-03/31	10																	
03/01-02/28	13	0	2	0	5	0	13	13	13	13	2	2	13	13	0	0	13	13
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	145	0	82	0	145	0	145	145	145	145	82	82	145	145	0	0	145	145
04/01-03/31	3																	
04/01-03/31	2																	

HAYRE NON-AMPS CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CL
6374	Sandon	N	479.6	0	0	0	108.5	0	306.9	0	0	0	70.2	0	10	CA 1 AN 2 DM
6375	Pealmist	N	66.0	0	0	0	0	0	66.0	0	0	0	0	0	1	CA 1 AN 1 DM
6376	Jimmy	N	94.9	0	0	0	78.9	0	0	0	0	0	16.0	0	10	CA 1 AN 1 DM
6377		N	39.9	0	0	0	0	0	39.9	0	0	0	0	0	10	SH
6379	Fairgrounds	N	319.8	0	0	0	0	0	240.7	0	0	0	79.1	0	6	H 6 AN 1 AN 2 DM
6380	Kell	N	183.7	0	0	0	0	0	169.4	0	0	0	16.3	0	5	CA 1 AN 1 DM
6381	M & M	N	117.7	0	0	0	0	0	91.5	0	0	0	26.2	0	3	CA 3 AN 1 DM
6383	Harvie	N	31.0	0	0	0	0	0	31.0	0	0	0	0	0	1	CA 1 AN 1 DM 1 DM
6384	Myron	N	61.9	0	0	0	7.0	0	37.3	0	0	0	17.6	0	1	CA 1 AN 1 DM
6385	Judisch	N	240.0	0	0	0	0	0	127.0	0	70.0	0	43.0	0	3	CA 1 AN 1 DM
6386	Mack	N	360.0	0	0	0	0	0	360.0	0	0	0	0	0	7	CA 1 AN 2 DM
6387	John	N	202.3	0	0	0	0	0	180.3	0	0	0	22.2	0	6	CA 3 AN 1 DM
6388	Annie	N	119.8	0	47.4	0	0	0	0	0	0	0	72.4	0	3	CA 1 AN 6 DM 1 ER
6390	Mickey	N	199.8	0	65.3	0	0	0	0	0	0	0	134.3	0	14	CA 1 AN 12 DM 3 ER
6391	Fay	N	29.8	0	8.5	0	0	0	0	0	0	0	21.3	0	1	CA 1 AN 3 DM 1 ER
6392	Antelope	N	317.0	0	0	0	93.8	0	221.0	0	0	0	2.2	0	8	CA 1 AN 4 DM
6394	Blackfoot	N	382.2	111.8	186.4	80.6	2.8	0	38.9	0	0	0	154.1	31.2	9	CA 3 AN 9 AN 15 DM 4 ER
6397	Oswood	N	635.6	59.9	209.8	9.7	10.8	0	0	0	0	0	415.0	50.2	5	CA 5 AN 2 AN 36 DM 7 ER
6401	Senator	N	359.5	0	0	0	0	0	273.6	0	0	0	85.9	0	6	CA 1 AN 1 DM
6402	Link	N	274.9	0	0	0	0	0	190.6	0	0	0	84.3	0	5	CA 1 AN 1 DM
6403	Shedrack	N	639.7	0	0	0	0	0	639.7	0	0	0	0	0	16	CA 1 AN 3 DM
6404	Tiber	N	39.9	0	0	0	0	0	39.9	0	0	0	0	0	1	CA 1 AN 1 DM
6405	Battle	N	519.4	0	0	0	0	0	519.4	0	0	0	0	0	11	CA 1 AN 2 DM

SEASON OF USE	CURRENT ST	AUM OTHER	REG. STOCKING		POTEN. FORAGE		ALTERNATIVE A ENHANC. COMBINED VEG. USES		ALTERNATIVE B CONTR. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATER/WILDLIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
			RATE/ADMS	REU	OTHER	REU	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	
			REU	OTHER	REU	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	120	0	68	0	119	0	120	120	120	120	68	68	120	120	0	0	120	120
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	8	0	12	0	23	0	8	8	8	8	12	12	8	8	0	0	8	8
04/01-03/31	2																	
04/01-03/31	2																	
06/01-09/30	40	0	24	0	31	0	40	40	40	40	24	24	40	40	0	0	40	40
04/01-03/31	2																	
04/01-03/31	2																	
09/16-11/30	5	0	6	0	11	0	5	5	5	5	6	6	5	5	0	0	5	5
03/01-02/28	80	0	29	0	58	0	80	80	80	80	29	29	80	80	0	0	80	80
12/01-03/31	3																	
04/01-11/30	1																	
04/01-03/31	5																	
03/01-02/28	62	0	23	0	46	0	62	62	62	62	23	23	62	62	0	0	62	62
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	44	0	14	0	28	0	44	44	44	44	14	14	44	44	0	0	44	44
04/01-03/31	5																	
04/01-03/31	2																	
03/08-09/07	7	0	8	0	17	0	7	7	7	7	8	8	7	7	0	0	7	7
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/29	10	0	9	0	16	0	10	10	10	10	9	9	10	10	0	0	10	10
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	37	0	16	0	39	0	37	37	37	37	16	16	37	37	0	0	37	37
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	90	0	37	0	73	0	90	90	90	90	37	37	90	90	0	0	90	90
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	68	0	32	0	63	0	68	68	68	68	32	32	68	68	0	0	68	68
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	37	0	18	0	18	0	37	37	37	37	18	18	37	37	0	0	37	37
04/01-03/31	2																	
04/01-03/31	14																	
04/01-03/31	8																	
12/01-02/28	43	0	37	0	37	0	43	43	43	43	37	37	43	43	0	0	43	43
04/01-03/31	2																	
04/01-03/31	29																	
04/01-03/31	25																	
03/01-02/28	14	0	5	0	5	0	14	14	14	14	5	5	14	14	0	0	14	14
04/01-03/31	2																	
04/01-03/31	7																	
04/01-03/31	8																	
03/01-02/28	100	0	91	0	154	0	100	100	100	100	91	91	100	100	0	0	100	100
04/01-03/31	2																	
04/01-03/31	10																	
03/01-02/28	115	0	100	41	108	41	115	115	115	115	100	100	115	115	0	0	115	115
04/01-11/30	3																	
12/01-03/31	5																	
12/01-03/31	36																	
12/01-03/31	34																	
03/01-02/28	36	0	101	4	102	4	36	36	36	36	101	101	36	36	0	0	36	36
12/01-03/31	3																	
11/30-04/01	2																	
04/01-03/31	86																	
04/01-03/31	59																	
03/01-02/28	70	0	39	0	79	0	70	70	70	70	39	39	70	70	0	0	70	70
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	34	0	24	0	47	0	34	34	34	34	24	24	34	34	0	0	34	34
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	195	0	82	0	163	0	195	195	195	195	82	82	195	195	0	0	195	195
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	10	0	4	0	9	0	10	10	10	10	4	4	10	10	0	0	10	10
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	139	0	63	0	125	0	139	139	139	139	63	63	139	139	0	0	139	139
04/01-03/31	2																	
04/01-03/31	5																	

HAYRE NON-AMPS CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLN	OTHER	BLN	OTHER	BLN	OTHER	BLN	OTHER	BLN	OTHER	BLN	OTHER	NO.	CA AN DM
6406	Kaun	N	39.6	0	0	0	38.6	0	0	0	0	0	1.0	0	1	CA AN DM
6407	Boozlegger	N	119.8	0	0	0	116.1	0	0	0	0	0	3.7	0	3	CA AN DM
6408	Pinto	N	119.8	0	0	0	99.7	0	14.9	0	0	0	5.2	0	3	CA AN DM
6409	Sawtooth	N	112.0	0	0	0	102.5	0	0	0	0	0	9.5	0	3	CA AN DM
6410	Warrick	N	40.0	0	0	0	38.0	0	0	0	0	0	2.0	0	1	CA AN DM
6411	IX Ranch	N	199.8	0	0	0	150.1	0	45.0	0	0	0	4.7	0	5	CA AN DM
6413	Weaver	N	153.4	0	0	0	48.8	0	46.6	0	0	0	58.0	0	3	CA AN DM
6416	Kings Coulee	N	159.4	0	0	0	0	0	148.6	0	0	0	10.8	0	100	CA AN DM
6417	Trafalgar	N	159.6	0	0	0	7.8	0	128.2	0	0	0	23.6	0	8	CA AN DM
6418	Blanchard	N	416.4	0	0	0	0	0	398.6	0	0	0	17.8	0	20	CA AN DM
6419	Kelly	N	241.4	0	0	0	0	0	210.4	0	0	0	31.0	0	10	CA AN DM
6420	Clinard Coulee	N	317.5	0	0	0	97.0	0	168.3	0	0	0	52.2	0	6	CA AN DM
6421	Henry	N	119.7	0	0	0	101.7	0	18.0	0	0	0	0	0	3	CA AN DM
6422	North Hanging 5	N	142.7	326.3	0	0	0	10.4	129.7	276.1	0	0	13.0	39.8	8	CA AN DM
6423	Cook	N	39.7	0	0	0	0	0	39.7	0	0	0	0	0	1	CA AN DM
6424	Blazek	N	336.3	0	0	0	182.7	0	72.9	0	0	0	80.7	0	15	CA AN DM
6425	Piedara	N	1335.7	0	0	0	699.2	0	269.0	0	0	0	367.5	0	4	CA AN DM
6426	Grouse	N	185.8	0	0	0	38.0	0	139.9	0	0	0	7.9	0	3	CA AN DM
6427	Redd	N	80.9	0	0	0	26.9	0	54.0	0	0	0	0	0	1	CA AN DM
6428	Bluestick	N	113.7	0	0	0	93.3	0	16.9	0	0	0	3.5	0	3	CA AN DM
6429	Pum	N	140.4	0	0	0	108.4	0	0	0	0	0	32.0	0	5	CA AN DM
6430	Braun	N	364.3	0	0	0	183.9	0	51.6	0	0	0	128.8	0	8	CA AN DM
6431	Cougar	N	331.6	0	0	0	240.9	0	84.3	0	0	0	6.2	0	9	CA AN DM
6432	Arroyo		552.3	0	0	0	0	0	499.6	0	0	0	52.7	0	11	CA AN DM

SEASON OF USE	CURRENT ALTM		REC. STOCKING RATE/ALTM		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED REC. USES		ALTERNATIVE B CONT. OF PRESENT MOW.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATERSHED/LIFE		ALTERNATIVE E NO LIVESTOCK CRATING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LV	ST	LV	ST	LV	ST	LV	ST	LV	ST	LV
03/01-02/28	14	0	10	0	14	0	14	14	14	14	10	10	14	14	0	0	14	14
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	35	0	28	0	38	0	35	35	35	35	28	28	35	35	0	0	35	35
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	37	0	25	0	35	0	37	37	37	37	25	25	37	37	0	0	37	37
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	38	0	25	0	37	0	38	38	38	38	25	25	38	38	0	0	38	38
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	11	0	17	0	22	0	11	11	11	11	17	17	11	11	0	0	11	11
04/01-03/30	2																	
04/01-03/31	2																	
03/01-02/28	60	0	51	0	72	0	60	60	60	60	51	51	60	60	0	0	60	60
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	34	0	17	0	27	0	34	34	34	34	17	17	34	34	0	0	34	34
04/01-03/31	2																	
04/01-03/31	5																	
03/08-09/07	25	0	25	0	49	0	25	25	25	25	25	25	25	25	0	0	25	25
04/01-03/31	2																	
04/01-03/31	2																	
03/01-06/31	23	0	19	0	37	0	23	23	23	23	19	19	23	23	0	0	23	23
04/01-03/31	2																	
04/01-03/31	7																	
03/15-09/15	81	0	66	0	132	0	81	81	81	81	66	66	81	81	0	0	81	81
04/01-03/31	2																	
04/01-03/31	14																	
08/01-01/15	55	0	28	0	55	0	55	55	55	55	28	28	55	55	0	0	55	55
04/01-03/31	2																	
04/01-03/31	10																	
03/01-02/28	70	0	47	0	80	0	70	70	70	70	47	47	70	70	0	0	70	70
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	34	0	27	0	39	0	34	34	34	34	27	27	34	34	0	0	34	34
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	35	0	20	0	41	0	35	35	35	35	20	20	35	35	0	0	35	35
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	12	0	6	0	11	0	12	12	12	12	6	6	12	12	0	0	12	12
04/01-03/31	2																	
04/01-03/31	2																	
03/15-11/14	90	0	57	0	85	0	90	90	90	90	57	57	90	90	0	0	90	90
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	54	0	138	0	238	0	54	54	54	54	158	158	54	54	0	0	54	54
04/01-03/31	3																	
04/01-03/31	19																	
03/01-02/28	42	0	31	0	55	0	42	42	42	42	31	31	42	42	0	0	42	42
04/01-03/31	2																	
04/01-03/31	2																	
03/01-01/08	18	0	14	0	25	0	18	18	18	18	14	14	18	18	0	0	18	18
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	33	0	24	0	35	0	33	33	33	33	24	24	33	33	0	0	33	33
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	53	0	27	0	36	0	53	53	53	53	27	27	53	53	0	0	53	53
04/01-03/30	2																	
04/01-03/31	2																	
04/15-10/31	42	0	57	0	82	0	42	42	42	42	57	57	42	42	0	0	42	42
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	107	0	73	0	107	0	107	107	107	107	73	73	107	107	0	0	107	107
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	139	0	71	0	142	0	139	139	139	139	71	71	139	139	0	0	139	139
04/01-03/31	2																	
04/01-03/31	22																	

HAYES NGM-AMFs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MCT STS	ACRES		EXCULPENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CL
6433	Valkrie	N	80.0	0	0	0	0	0	68.9	0	0	0	11.1	0	2 1 1	AN DM
6436	Lasso	N	40.0	0	0	0	38.5	0	0	0	0	0	1.5	0	1 1 1	CA AN DM
6437	Loma Ranch	N	100.8	0	0	0	6.0	0	84.8	0	0	0	10.0	0	2 1 1	CA AN DM
6438	Hackamore	N	358.4	0	0	0	0	0	346.2	0	0	0	14.2	0	5 1 2	CA AN DM
6440	Latigo	N	399.6	0	0	0	0	0	349.1	0	0	0	50.5	0	5 1 5	S AN DM
6441	Stevens	N	456.1	0	6.0	0	283.5	0	75.7	0	0	0	90.9	0	17 1 3	CA AN DM
6443	Marias Brooks	N	181.3	0	0	0	4.0	0	164.2	0	0	0	13.1	0	6 1 2	CA AN DM
6454	Two-bit	N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	1 1 1	CA AN DM
6456	Reservation	N	425.8	0	134.9	0	256.8	0	0	0	0	0	34.1	0	3 1 4	CA AN DM
6457	South Baldy	N	119.9	0	0	0	109.3	0	0	0	0	0	10.6	0	3 2 1	CA AN DM
6458	Bears Paw	N	23.0	0	0	0	22.5	0	0	0	0	0	2.5	0	1 1 1	CA AN DM
6459	Bull Hook	N	40.0	0	0	0	0	0	40.0	0	0	0	0	0	1 1 1	CA AN DM
6460	Kremlin	N	80.0	0	0	0	0	0	80.0	0	0	0	0	0	2 1 1	CA AN DM
6461	Fresno	N	120.0	0	0	0	88.5	0	0	0	0	0	31.5	0	1 1 1	CA AN DM
6462	Dynasty	N	81.9	0	0	0	0	0	81.9	0	0	0	0	0	2 1 1	CA AN DM
6464	Strudel	N	80.0	0	0	0	0	0	80.0	0	0	0	0	0	1 1 1	CA AN DM
6465	Signal	N	181.8	0	0	0	0	0	180.5	0	0	0	1.3	0	2 1 1	CA AN DM
6466	Haugen	N	40.0	0	0	0	0	0	40.0	0	0	0	0	0	1 1 1	CA AN DM
6467	Hot Iron	N	40.0	0	0	0	0	0	19.0	0	0	0	21.0	0	1 1 1	CA AN DM
6468	Lobo	N	872.0	0	0	0	0	0	716.0	0	0	0	156.0	0	15 3 5	CA AN DM
6469	Apple	N	79.7	0	0	0	0	0	70.5	0	0	0	9.2	0	2 1 1	CA AN DM
6473	Sunburst	N	62.9	0	0	0	0	0	62.9	0	0	0	0	0	3 1 1	CA AN DM
6474	Good	N	71.0	0	0	0	6.0	0	39.0	0	0	0	26.0	0	2 1 1	CA AN DM
6475	Viny Point	N	159.7	0	0	0	0	0	137.0	0	0	0	22.7	0	2 1 3	CA AN DM
6476	Chauvet	N	119.4	0	0	0	54.5	0	64.9	0	0	0	0	0	2 1 1	CA AN DM

SEASON OF USE	CURRENT ADMS		REC. STOCKING RATE/ADMS		POTEN. PORAGE PRODUCTION		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F		
							ENHANC. COMBINED VEG. USES		CONST. OF PRESENT MGMT.		ENHANCED LIVST. PORAGE		ENHANCED MATERIAL/LIFE		NO LIVESTOCK CRAZING		NO ACTION		
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	
03/01-02/28	20	2	0	0	18	0	20	20	20	20	15	15	20	20	0	0	20	20	
04/01-03/31	2	2																	
03/01-02/28	20	2	0	15	0	28	0	20	20	20	15	15	20	20	0	0	20	20	
04/01-03/31	2	2																	
03/01-02/28	54	2	0	49	0	97	0	54	54	54	49	49	54	54	0	0	54	54	
04/01-03/31	2	2																	
04/01-03/31	5	5																	
03/01-02/28	66	12	0	50	0	101	0	66	66	66	66	50	50	66	66	0	0	66	66
04/01-03/31	2	2																	
04/01-03/31	12	12																	
05/01-08/15	58	7	0	50	0	74	0	58	58	58	58	50	50	58	58	0	0	58	58
04/01-03/31	2	2																	
04/01-03/31	7	7																	
03/01-02/28	40	2	0	21	0	40	0	40	40	40	21	21	40	40	0	0	40	40	
04/01-03/31	2	2																	
04/01-03/31	9	9																	
03/01-02/28	10	2	0	10	0	10	0	10	10	10	10	10	10	10	0	0	10	10	
04/01-03/31	2	2																	
04/01-03/31	2	2																	
06/01-10/31	34	2	0	34	0	34	0	34	34	34	34	34	34	34	0	0	34	34	
04/01-03/31	2	2																	
04/01-03/31	10	10																	
06/15-09/15	43	3	0	24	0	36	0	43	43	43	43	24	24	43	43	0	0	43	43
04/01-03/31	2	2																	
04/01-03/31	4	4																	
06/01-09/30	4	2	0	3	0	6	0	4	4	4	4	3	3	4	4	0	0	4	4
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/28	8	2	0	11	0	23	0	8	8	8	11	11	8	8	0	0	8	8	
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/21	27	2	0	16	0	32	0	27	27	27	27	16	16	27	27	0	0	27	27
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/28	16	2	0	19	0	25	0	16	16	16	16	19	19	16	16	0	0	16	16
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/28	25	2	0	16	0	32	0	25	25	25	25	16	16	25	25	0	0	25	25
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/28	16	2	0	14	0	27	0	16	16	16	16	14	14	16	16	0	0	16	16
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/28	35	2	0	30	0	60	0	35	35	35	35	30	30	35	35	0	0	35	35
04/01-03/31	2	2																	
04/01-03/31	2	2																	
07/17-02/29	12	2	0	8	0	16	0	12	12	12	12	8	8	12	12	0	0	12	12
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/28	7	2	0	4	0	8	0	7	7	7	7	4	4	7	7	0	0	7	7
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/28	180	12	0	61	23	121	46	180	180	180	180	61	61	180	180	0	0	180	180
04/01-03/31	5	5																	
04/01-03/31	12	12																	
03/01-02/28	27	2	0	13	0	26	0	27	27	27	27	13	13	27	27	0	0	27	27
04/01-03/31	2	2																	
04/01-03/31	2	2																	
05/01-08/31	37	2	0	10	0	20	0	37	37	37	37	10	10	37	37	0	0	37	37
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/28	27	2	0	10	0	19	0	27	27	27	27	10	10	27	27	0	0	27	27
04/01-03/31	2	2																	
04/01-03/31	2	2																	
03/01-02/28	22	7	0	19	0	38	0	22	22	22	22	19	19	22	22	0	0	22	22
04/01-03/31	2	2																	
04/01-03/31	7	7																	
03/01-02/11	22	2	0	24	0	41	0	22	22	22	22	24	24	22	22	0	0	22	22
04/01-03/31	2	2																	
04/01-03/31	2	2																	

HAYRE NON-AMPA CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRazing ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CL
6477	Dietz	N	277.7	0	0	0	83.2	0	167.2	0	0	0	33.3	0	3	CA
															1	AN
															5	DM
6478	Teton	N	517.1	0	0	0	26.6	0	432.9	0	0	0	57.6	0	15	CA
															1	AN
															8	DM
6479	Shawrock	N	39.8	0	0	0	0	0	38.8	0	0	0	1.0	0	1	CA
															1	AN
															1	DM
6480	Jacobson	N	40.0	0	0	0	38.0	0	0	0	0	0	2.0	0	1	CA
															1	AN
															1	DM
6481	Jurenka	N	123.8	0	0	0	70.2	0	17.8	0	0	0	37.8	0	1	CA
															1	AN
															1	DM
6482	Badger	N	472.8	0	0	0	408.2	0	0	0	0	0	64.6	0	11	CA
															3	AN
															7	DM
6484	Sunset	N	564.3	0	0	0	0	0	544.7	0	0	0	19.6	0	13	CA
															1	AN
															5	DM
6485	Marias River Two	N	278.3	0	0	0	165.5	0	56.9	0	0	0	55.9	0	4	CA
															1	AN
															1	DM
6487	Melby	N	120.0	0	0	0	0	0	0	0	0	0	120.0	0	3	CA
															1	AN
															1	DM
6488	West Lonsome Lake	N	119.8	0	0	0	0	0	119.8	0	0	0	0	0	4	CA
															1	AN
															1	DM
6489	Gold Eagle	N	239.6	0	0	0	0	0	239.6	0	0	0	0	0	5	CA
															1	AN
															2	DM
6491	Pine Tree	N	79.8	0	0	0	73.8	0	0	0	0	0	6.0	0	2	CA
															1	AN
															1	DM
6492	Parsell	N	80.0	0	0	0	36.0	0	40.0	0	0	0	4.0	0	3	CA
															1	AN
															1	DM
6494	Redwing	N	18.0	0	0	0	18.0	0	0	0	0	0	0	0	1	CA
															1	AN
															1	DM
6583	Tunis	N	39.7	0	0	0	29.3	0	8.9	0	0	0	1.5	0	1	CA
															1	AN
															1	DM
															10	SH
Sub Total Non-AMPA			59364	37999	771	90	29391	25899	22930	9294	384	0	5888	2716		

*HAYRE RESOURCE AREA NON-AMPA CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRazing ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CL
6153	Maagle Creek	N	1255.1	0	0	0	840.6	0	109.5	0	0	0	305.0	0	106	C
															6	AN
															8	DM
6154	Hirdtail Butte	N	578.0	0	0	0	152.8	0	372.0	0	0	0	53.2	0	11	C
															3	AN
															3	DM
6155	McCann Butte	N	40.0	0	0	0	32.0	0	0	0	0	0	8.0	0	2	C
															1	AN
															1	DM
6161	Sixteenth	N	79.8	898.4	0	0	0	237.0	79.8	602.4	0	0	0	0	1	C
															1	AN
															1	DM
6162	Rocky Creek	N	157.0	0	0	0	0	0	144.3	0	0	0	12.7	0	1	C
															1	AN
															1	DM
6163	Sawtooth Mtn.	N	239.8	0	0	0	76.8	0	139.7	0	0	0	23.3	0	4	C
															2	AN
															2	DM
6166	Pioneer	N	639.9	0	0	0	557.9	0	38.0	0	0	0	44.0	0	60	C
															3	AN
															3	DM

SEASON OF USE	CURRENT AUMs		REC. STOCKING RATE/AUMs		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANS. COMBINED VFG. USES		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATERWILDLIFE		ALTERNATIVE E NO LIVESTOCK CHASING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	35	0	40	0	69	0	30	30	30	30	40	40	30	30	0	0	30	30
04/01-03/31	2																	
04/01-03/31	12																	
06/01-11/01	77	0	65	0	127	0	77	77	77	77	65	65	77	77	0	0	77	77
04/01-03/31	2																	
04/01-03/31	19																	
03/01-02/28	14	0	8	0	15	0	14	14	14	14	8	8	14	14	0	0	14	14
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	14	0	9	0	12	0	14	14	14	14	9	9	14	14	0	0	14	14
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	7	0	15	0	22	0	7	7	7	7	15	15	7	7	0	0	7	7
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	134	0	84	0	114	0	134	134	134	134	84	84	134	134	0	0	134	134
04/01-03/31	5																	
04/01-03/31	17																	
03/01-02/28	160	0	82	0	165	0	160	160	160	160	82	82	160	160	0	0	160	160
04/01-03/31	2																	
04/01-03/31	12																	
05/01-10/15	38	0	41	0	60	0	38	38	38	38	41	41	38	38	0	0	38	38
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	31	0	31	0	31	0	31	31	31	31	31	31	31	31	0	0	31	31
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	48	0	22	0	0	44	48	48	48	48	22	22	48	48	0	0	48	48
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	70	0	36	0	0	73	70	70	70	70	36	36	70	70	0	0	70	70
04/01-03/31	2																	
04/01-03/31	3																	
03/01-02/28	18	0	22	0	31	0	18	18	18	18	22	22	18	18	0	0	18	18
04/01-03/31	2																	
04/01-03/31	2																	
05/01-10/31	18	0	27	0	44	0	18	18	18	18	27	27	18	18	0	0	18	18
04/01-03/31	2																	
04/01-03/31	2																	
06/01-08/31	3	0	8	0	10	0	3	3	3	3	8	8	3	3	0	0	3	3
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	12	0	8	0	13	0	12	12	12	12	8	8	12	12	0	0	12	12
04/01-03/31	2																	
04/01-03/31	2																	
09/16-11/30	5																	
Sub Total	12519	5021	12241	8438	18471	12612	12519	12519	12519	12519	12241	12241	12411	12411	0	0	12519	12519

SEASON OF USE	CURRENT AUMs		REC. STOCKING RATE/AUMs		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANS. COMBINED VFG. USES		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATERWILDLIFE		ALTERNATIVE E NO LIVESTOCK CHASING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	242	505	287	0	404	0	242	242	242	242	287	287	242	242	0	0	242	242
04/01-03/31	9																	
04/01-03/31	19																	
03/01-02/28	134	0	132	0	224	0	134	134	134	134	132	132	134	134	0	0	134	134
04/01-03/31	5																	
04/01-03/31	7																	
03/01-02/28	29	0	13	0	17	0	29	29	29	29	13	13	29	29	0	0	29	29
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	8	0	14	187	27	313	8	8	8	8	14	14	8	8	0	0	8	8
04/01-03/31	2																	
04/01-03/31	2																	
05/01-02/28	13	0	22	0	45	0	13	13	13	13	22	22	13	13	0	0	13	13
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	52	0	79	0	136	0	52	52	52	52	79	79	52	52	0	0	52	52
04/01-03/31	3																	
04/01-03/31	5																	
03/01-06/19	60	0	115	0	157	0	60	60	60	60	115	115	60	60	0	0	60	60
04/01-03/31	5																	
04/01-03/31	7																	

HAYRE RESOURCE AREA UNALLOCATED TRACTS

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		RANGE CONDITION		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	ACRES
6382	Unallocated		40.0						35.2						1	AN
6400	"		80.0						80.0						1	AN
6501	"		80.0	234.0			78.9	233.5					1.1	0.5	1	AN
6502	"		26.8				26.6						0.2		1	AN
6503	"		39.7				39.7								1	AN
6505	"		32.7				32.7								1	AN
6507	"		40.0				19.0						21.0		1	AN
6508	"		26.0						26.0						1	AN
6509	"		79.7						76.3				3.4		1	AN
6511	"		168.8	38.9			144.4	22.8	6.9	14.9			17.5	1.2	1	AN
6512	"		40.0						38.5				1.5		1	AN
6513	"		39.7				18.9		20.8						1	AN
6514	"		39.8						39.8						1	AN
6515	"		28.9						6.9				22.0		1	AN
6516	"		39.8				20.4		18.9				0.5		1	AN
6517	"		86.6				57.7		28.9						1	AN
6518	"		40.0				39.3						0.7		1	AN
6519	"		28.9				28.9								1	AN
6520	"		79.7						57.0				22.7		1	AN
6521	"		39.7				8.9		30.8						1	AN
6522	"		63.8				63.8								1	AN
6524	"		40.0				13.6		25.9				0.5		1	AN
6525	"		40.0						40.0						1	AN
6526	"		139.8						68.8				71.0		1	AN
6527	"		79.7				78.8		.9						1	AN
6528	"		40.0						40.0						1	AN
6529	"		40.0						40.0						1	AN
6530	"		40.0				33.6						6.4		1	AN
6531	"		40.0						40.0						1	AN
6532	"		61.9				29.4		11.0				1.5		1	AN
6533	"		40.0						38.0				2.0		1	AN
6534	"		39.8						38.3				1.5		1	AN
6535	"		39.6				8.0		30.0				1.6		1	AN
6536	"		44.9				37.2						7.7		1	AN

SEASON OF USE	CURRENT AUMs		REC. STOCKING RATE/AUMs		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED VEG. USES		ALTERNATIVE B COMF. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATER/WILDLIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
04/01-03/31	2		5	0	10	0												
04/01-03/31	2		11	0	22	0												
04/01-03/31	2		22	0	29	0												
04/01-03/31	2		11	0	14	0												
04/01-03/31	2		12	0	16	0												
04/01-03/31	2		10	0	13	0												
04/01-03/31	2		4	0	6	0												
04/01-03/31	2		4	0	4	0												
04/01-03/31	2		12	0	24	0												
04/01-03/31	2		31	0	43	0												
04/01-03/31	2		5	0	10	0												
04/01-03/31	2		9	0	14	0												
04/01-03/31	2		6	0	12	0												
04/01-03/31	2		1	0	2	0												
04/01-03/31	2		7	0	11	0												
04/01-03/30	2		21	0	31	0												
04/01-03/31	2		12	0	16	0												
04/01-03/31	2		9	0	12	0												
04/01-03/31	2		7	0	15	0												
04/01-03/31	2		7	0	13	0												
04/01-03/31	2		19	0	26	0												
04/01-03/31	2		9	0	15	0												
04/01-03/31	2		6	0	13	0												
04/01-03/31	2		12	0	24	0												
04/01-03/31	2		18	0	24	0												
04/01-03/31	2		6	0	12	0												
04/01-03/31	2		8	0	15	0												
04/01-03/30	2		7	0	9	0												
04/01-03/31	2		8	0	16	0												
04/01-03/31	2		11	0	16	0												
04/01-03/31	2		5	0	12	0												
04/01-03/31	2		6	0	12	0												
04/01-03/31	2		7	0	12	0												
04/01-03/31	2		10	0	13	0												

HAVE RESOURCE AREA UNALLOCATED TRACTS CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		RANGE CONDITION		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
6538	Unallocated		39.9	0	0	0	0	0	33.1	0	0	0	0	0	4.8	0	1	AN
																	1	DM
6540	"		58.8	0	0	0	57.6	0	0	0	0	0	0	0	1.2	0	1	AN
																	1	DM
6541	"		34.9	0	0	0	18.0	0	10.4	0	3.8	0	2.7	0	1	AN	1	AN
																	1	DM
6542	"		39.9	0	0	0	0	0	39.9	0	0	0	0	0	1	AN	1	AN
																	1	DM
6544	"		70.0	0	0	0	0	0	70.0	0	0	0	0	0	1	AN	1	AN
																	1	DM
6545			40.0	0	0	0	0	0	40.0	0	0	0	0	0	1	AN	1	AN
																	1	DM
6546	"		39.6	0	0	0	0	0	39.6	0	0	0	0	0	1	AN	1	AN
																	1	DM
6549	"		39.8	0	0	0	0	0	27.6	0	0	0	12.2	0	1	AN	1	AN
																	1	DM
6551	"		10.9	0	0	0	0	0	7.6	0	0	0	3.3	0	1	AN	1	AN
																	1	DM
6554	"		79.8	0	0	0	74.5	0	0	0	0	0	5.3	0	1	AN	1	AN
																	1	DM
6555	"		40.0	0	0	0	0	0	32.0	0	0	0	8.0	0	1	AN	1	AN
																	1	DM
6556	"		63.0	0	0	0	63.0	0	0	0	0	0	0	0	1	AN	1	AN
																	1	DM
6557	"		57.9	0	0	0	0	0	45.1	0	0	0	12.8	0	1	AN	1	AN
																	1	DM
6558	"		40.0	0	0	0	0	0	36.0	0	0	0	4.0	0	1	AN	1	AN
																	1	DM
6559	"		39.8	0	0	0	0	0	39.8	0	0	0	0	0	1	AN	1	AN
																	1	DM
6560	"		40.0	0	0	0	0	0	40.0	0	0	0	0	0	1	AN	1	AN
																	1	DM
6561			72.0	0	0	0	54.9	0	0	0	0	0	17.1	0	1	AN	1	AN
																	1	DM
6562	"		131.4	0	0	0	17.8	0	109.4	0	0	0	4.2	0	1	AN	1	AN
																	1	DM
6563	"		39.7	0	0	0	39.7	0	0	0	0	0	0	0	1	AN	1	AN
																	1	DM
6564	"		39.9	0	0	0	0	0	39.9	0	0	0	0	0	1	AN	1	AN
																	1	DM
6565	"		828.9	0	0	0	0	0	828.9	0	0	0	0	0	2	AN	4	AN
6567	"		20.9	0	0	0	20.5	0	0	0	0	0	0.4	0	1	AN	1	AN
																	1	DM
6568	"		41.0	0	0	0	32.8	0	0	0	0	0	8.2	0	1	AN	1	AN
																	1	DM

SEASON OF USE	CURRENT ALTH		REG. STOCKING		POTEN. FORAGE		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
	BLM OTHER		RATE/ALTH		PRODUCTION		ERIAN CORVING		VEG. USES		GOVT. OF		ENHANCED		ENHANCED		NO LIVESTOCK	
	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
04/01-03/31	2	0	10	0	21	0												
04/01-03/31	2	0																
04/01-03/31	2	0	8	0	15	0												
04/01-03/31	2	0																
04/01-03/31	2	0	11	0	22	0												
04/01-03/31	2	0																
04/01-03/30	2	0	14	0	28	0												
04/01-03/31	2	0																
04/01-03/31	2	0	8	0	16	0												
04/01-03/31	2	0																
04/01-03/31	2	0	6	0	13	0												
04/01-03/31	2	0																
04/01-03/31	2	0	4	0	7	0												
04/01-03/31	2	0																
04/01-03/31	2	0	1	0	3	0												
04/01-03/31	2	0																
04/01-03/31	2	0	19	0	26	0												
04/01-03/31	2	0																
04/01-03/31	2	0	12	0	23	0												
04/01-03/31	2	0																
04/01-03/31	2	0	23	0	30	0												
04/01-03/31	2	0																
04/01-03/31	2	0	9	0	18	0												
04/01-03/31	2	0																
04/01-03/31	2	0	10	0	21	0												
04/01-03/31	2	0																
04/01-03/30	2	0	10	0	20	0												
04/01-03/31	2	0																
04/01-03/31	2	0	11	0	23	0												
04/01-03/31	2	0																
04/01-03/31	2	0	13	0	17	0												
04/01-03/31	2	0																
04/01-03/31	2	0	22	0	41	0												
04/01-03/31	2	0																
04/01-03/31	2	0	11	0	15	0												
04/01-03/31	2	0																
04/01-03/31	2	0	7	0	14	0												
04/01-03/31	2	0																
04/01-03/31	2	0	97	0	193	0												
04/01-03/31	2	0																
04/01-03/31	2	0	4	0	6	0												
04/01-03/31	2	0																

HAYRE RESOURCE AREA UNALLOCATED TRACTS CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CL
6569			201.8	0	0	0	0	0	175.6	0	0	0	26.2	0	1	AN 3 DM
6571	"		39.7	0	0	0	0	0	39.7	0	0	0	0	0	1	AN 1 DM
6572	"		39.8	0	7.9	0	0	0	0	0	0	0	31.9	0	1	AN 3 DM
6574	"		79.8	0	37.3	0	0	0	0	0	0	0	42.3	0	1	AN 3 DM
6575	"		40.0	0	8.2	0	0	0	0	0	0	0	31.8	0	1	AN 3 DM
6576			153.4	0	18.0	0	102.0	0	0	0	0	0	33.4	0	1	AN 9 DM
6577	"		10.0	0	0	0	0	0	10.0	0	0	0	0	0	1	AN 1 DM
6578	"		16.0	0	0	0	16.0	0	0	0	0	0	0	0	1	AN 1 DM
6579	"		68.0	0	0	0	68.0	0	0	0	0	0	0	0	1	AN 1 DM
6580	"		32.9	0	0	0	9.1	0	18.9	0	0	0	4.9	0	1	AN 1 DM
6581	"		35.9	0	0	0	0	0	17.9	0	0	0	18.0	0	1	AN 1 DM
6586	"		39.7	0	0	0	0	0	39.7	0	0	0	0	0	1	AN 1 DM
Sub Total Unallocated			4471	273	72	0	1353	256	2582	15	4	0	460	2		
Total Hayre RA			344410	311701	5219	1069	201685	233809	120022	61046	1552	715	15932	13062		

SEASON OF USE	CURRENT AUMs		REC. STOCKING		POTEN. FORAGE		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
	AUMs		RATE/AUMs		PRODUCTION		ENHANC. COMBINED		CONV. OF		ENHANCED		ENHANCED		NO LIVESTOCK		NO ACTION	
	SLM	OTHER	SLM	OTHER	SLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
04/01-03/31	2	0	5	0	8	0												
04/01-03/31	2	0	24	0	47	0												
04/01-03/31	2	0	7	0	15	0												
04/01-03/31	2	0	4	0	4	0												
04/01-03/31	2	0	15	0	15	0												
04/01-03/31	2	0	3	0	3	0												
04/01-03/31	2	0	50	0	64	0												
04/01-03/31	2	0	2	0	3	0												
04/01-03/31	2	0	4	0	6	0												
04/01-03/31	2	0	20	0	27	0												
04/01-03/31	2	0	5	0	9	0												
04/01-03/31	2	0	5	0	10	0												
04/01-03/31	2	0	7	0	13	0												
Sub Total			816	0	1352	0												
Grand Totals	73541	55060	78505	73816	118367	108370	73525	92630	73525	83746	77701	130747	55636	64350	0	0	73525	73525

PHILLIPS RESOURCE AREA PROPOSED ANPs

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT				GOOD				RANGE CONDITION				POOR				UNSATISFACTORY				GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5000	Corner	P	480.0	320.0	0	0	0	0	480.0	320.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	CA
																									1	AN
																									1	DM
5003	West Sunnyslope	P	1439.8	0	0	0	0	0	1039.8	0	400.0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	CA
																									2	BO
																									1	AN
																									3	DM
5004	Midsummyslope	P	799.7	0	0	0	0	0	799.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	CA
																									1	AN
																									2	DM
5005	Nina Coulee	P	1285.5	30.9	0	0	0	0	1259.5	30.9	26.0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	CA
																									73	CA
																									1	AN
																									3	DM
5006	North Sunnyslope	P	1757.8	320.0	0	0	0	0	1757.8	320.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	CA
																									60	CA
																									2	BO
																									1	AN
																									4	DM
5007	East Sunnyslope	P	799.6	799.4	0	0	0	0	799.6	799.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	CA
																									1	AN
																									2	DM
5009	Upper Whitewater Creek	P	4667.8	640.0	0	0	0	0	4550.8	640.0	0	0	117.0	0	0	0	0	0	0	0	0	0	0	0	17	CA
																									142	CA
																									142	CA
																									162	CA
																									4	AN
																									11	DM
5010	Fanning Coulee	P	1710.7	815.5	0	0	0	0	927.0	379.5	783.7	436.0	0	0	0	0	0	0	0	0	0	0	0	0	2	CA
																									105	CA
																									1	AN
																									4	DM
5011	West Big Coulee	P	4710.5	719.4	0	0	0	0	4710.5	719.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	CA
																									155	CA
																									4	AN
																									11	DM
5013	Divide	P	7980.3	1901.4	0	0	0	0	7876.4	1901.4	103.9	0	0	0	0	0	0	0	0	0	0	0	0	0	32	CA
																									225	CA
																									78	CA
																									5	AN
																									18	DM
5014	North Pea Lake	P	9272.0	0	0	0	0	0	9199.0	0	0	0	0	73.0	0	0	0	0	0	0	0	0	0	0	20	CA
																									36	CA
																									50	CA
																									225	CA
																									220	CA
																									127	CA
																									8	BO
																									6	AN
																									22	DM
5015	South Pea Lake	P	9612.9	42.7	0	0	0	0	8092.6	31.8	1444.3	10.9	76.0	0	0	0	0	0	0	0	0	0	0	0	19	CA
																									300	CA
																									6	AN
																									23	DM
5018	East Pea Lake	P	553.9	0	0	0	0	0	314.0	0	211.0	0	28.9	0	0	0	0	0	0	0	0	0	0	0	13	CA
																									1	AN
																									1	DM
5019	Elmer Coulee	P	1228.8	0	0	0	0	0	519.9	0	708.9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	CA
																									57	AN
																									1	AN
																									3	DM
5020	North Pleasant View	P	400.0	0	0	0	0	0	82.0	0	318.0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	CA
																									1	AN
																									1	DM
5021	Orrey Coulee	P	3548.2	1146.2	0	0	0	0	2002.6	850.2	1545.6	296.0	0	0	0	0	0	0	0	0	0	0	0	0	3	CA
																									250	CA
																									300	CA
																									300	CA
																									300	CA
																									2	AN
																									8	DM
5022	East Pleasant View	P	2193.9	89.9	0	0	0	0	1957.7	38.4	116.0	49.0	0	0	0	0	0	0	0	0	0	0	0	0	9	CA
																									130	CA
																									120	CA
																									1	AN
																									5	DM
5024	Upper Snake Creek	P	7390.8	7009.3	0	0	0	0	4531.5	5421.8	1745.1	1193.6	0	0	0	0	0	0	0	0	0	0	0	0	300	CA
																									550	CA
																									568	CA
																									550	CA
																									5	AN
																									41	DM
																									411	DM

SEASON OF USE	CURRENT ADMs	REC. STOCKING			POTEN. FORAGE			ALTERNATIVE A EMMAN. COMBINED		ALTERNATIVE B CONT. OF		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK		ALTERNATIVE F NO ACTION	
		RATE/ADMs		OTHER	PRODUCTION		OTHER	VEG. USES		PRESENT MGMT.		LVT. FORAGE		WATER/WILDLIFE		GRAZING			
		BLM	OTHER		ST	LT		ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
06/01-09/30	142	94	143	95	191	127		142	173	142	142	143	275	107	107	0	0	142	142
04/01-03/31	2																		
04/20-11/20	277	0	389	0	573	0	277	338		277	277	389	879	185	185	0	0	277	277
04/20-11/20	2																		
04/01-03/31	7																		
05/01-09/15	181		235	0	313	0	181	221		181	181	235	450	101	101	0	0	181	181
04/01-03/31	2																		
04/01-03/31	5																		
03/01-02/28	245	71	375	9	504	12	245	299		245	245	375	748	239	239	0	0	245	245
07/01-10/30	2																		
04/01-03/31	7																		
04/01-03/31	7																		
04/27-10/25	345	82	519	95	693	127	345	421		345	345	519	1019	241	241	0	0	345	345
11/01-11/30																			
03/01-08/31	2																		
04/01-03/31	10																		
04/15-12/14	165	181	232	235	310	314	165	201		165	165	232	454	113	113	0	0	165	165
04/01-03/31	2																		
04/01-03/31	5																		
03/01-02/28	1010	260	1341	191	1822	254	1010	1232		1010	1010	1341	2627	614	614	0	0	1010	1010
03/02-05/31																			
09/11-11/30																			
06/01-09/10	6																		
04/01-03/31	26																		
04/01-03/31	26																		
03/01-02/28	337	131	384	159	615	270	337	411		337	337	384	771	337	337	0	0	337	337
06/01-10/06																			
04/01-03/31	2																		
04/01-03/31	10																		
03/01-02/28	1017	142	1386	212	1850	283	1017	1241		1017	1017	1386	2721	707	707	0	0	1017	1017
03/01-11/30	6																		
04/01-03/31	26																		
04/01-03/31	26																		
03/01-02/28	1785	531	2352	564	3153	753	1785	2177		1785	1785	2352	3586	1205	1205	0	0	1785	1785
04/18-11/31																			
06/01-10/30	8																		
04/01-03/31																			
04/01-03/31																			
03/01-02/28	2316	227	2606	0	3508	0	2316	2823		2316	2316	2606	4926	1622	1622	0	0	2316	2316
04/01-11/30																			
04/20-05/31																			
06/01-06/30																			
07/14-11/05																			
04/25-11/10																			
04/01-10/31	9																		
04/01-03/31	53																		
04/01-03/31	53																		
03/01-02/28	2265	7	2570	11	3632	15	2265	2763		2265	2265	2570	4971	1379	1385	0	0	2265	2265
04/15-10/26																			
04/01-03/31	9																		
04/01-03/31	55																		
03/01-02/28	157	134	0	215	0	157	192	157		157	157	157	162	105	288	0	0	157	157
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	348	288	0	474	0	348	425	348		348	348	288	633	257	342	0	0	348	348
03/15-11/04																			
04/01-03/31	2																		
04/01-03/31	7																		
03/01-02/28	96	85	0	155	0	96	117	96		96	96	96	233	64	109	0	0	96	96
04/01-03/31	2																		
04/01-03/31	2																		
03/01-02/28	859	429	906	311	1413	454	859	1099		859	859	906	2391	534	692	0	0	859	859
04/20-04/30																			
05/01-05/20																			
05/21-06/16																			
07/11-08/21																			
09/23-10/25																			
04/01-03/31	3																		
04/01-03/31	19																		
03/01-02/28	471	22	603	20	830	33	471	575		471	471	603	1173	161	164	0	0	471	471
04/15-06/10																			
06/11-07/15																			
04/01-03/31	2																		
04/01-03/31	12																		
04/01-05/09	1042	2477	1242	1490	1828	2108	1042	1179		1042	1042	1242	1928	644	734	0	0	1042	1042
05/11-06/27																			
06/28-08/31																			
09/01-10/28																			
04/01-03/31	8																		
04/01-11/30	66																		
12/01-03/31	35																		

PHILLIPS RESOURCE AREA PROPOSED AMPS CONTINUED

ALLOT. NO.	ALLIANCE NAME	MCT STS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSATISFACTORY		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5027	Cottonwood Creek	P	5993.7	2899.2	0	0	4058.3	1370.6	932.6	1380.3	0	0	1022.8	148.1	200	CA
															4	CA
															33	DM
															33	DM
5028	West Cottonwood	P	607.3	1115.7	0	0	366.5	917.3	236.6	107.6	0	0	4.2	90.8	9	CA
															1	AN
															1	DM
5031	Wallis Coulee	P	1764.8	1674.8	0	0	1441.0	1008.1	323.8	662.9	0	0	0	3.8	2	CA
															126	CA
															200	CA
															126	CA
															1	AN
															4	DM
5033	Kashaw Coulee	P	1039.4	0	0	0	463.6	0	575.8	0	0	0	0	0	2	CA
															40	CA
															1	AN
															8	DM
5035	North Whitewater Lake	P	6429.4	1316.7	0	0	4422.3	1056.7	1924.1	260.0	83.0	0	0	0	8	CA
															200	CA
															230	CA
															4	AN
															13	DM
5039	Whitewater Creek	P	5484.1	1421.3	0	0	4847.6	1149.6	636.5	271.7	0	0	0	0	18	CA
															234	CA
															4	AN
															13	DM
5040	Wren Coulee	P	1319.3	1191.6	0	0	1305.3	1181.6	14.0	10.0	0	0	0	0	22	CA
															1	AN
															3	DM
5041	Lake Coulee	P	5814.2	2395.8	0	0	5784.2	2297.0	30.0	98.8	0	0	0	0	5	CA
															100	CA
															151	CA
															206	CA
															3	CA
															206	CA
															58	CA
															5	AN
															14	DM
5042	Fiat Coulee	P	2604.6	1080.9	0	0	2604.6	1080.9	0	0	0	0	0	0	2	CA
															134	CA
															2	AN
															6	DM
5043	Horseshoe Lake	P	11385.0	3728.3	0	0	9374.8	3265.6	1990.2	462.7	0	0	20.0	0	1	CA
															141	CA
															330	CA
															9	AN
															27	DM
5044	North Horseshoe Lake	P	1964.8	399.8	0	0	1964.8	399.8	0	0	0	0	0	0	70	CA
															90	CA
															40	CA
															23	CA
															1	CA
															2	AN
															5	DM
5045	All Pronto	P	639.9	0	0	0	487.9	0	152.0	0	0	0	0	0	24	CA
															1	AN
															2	DM
5047	Horseshoe Coulee	P	6016.3	4191.2	0	0	5363.3	3829.5	640.8	359.7	0	0	12.2	2.0	7	CA
															239	CA
															272	CA
															5	AN
															13	DM
5049	North Black Coulee	P	151.9	0	0	0	94.4	0	33.9	0	0	0	23.6	0	74	CA
															1	AN
															2	DM
5052	Cowie Coulee	P	457.6	0	0	0	457.6	0	0	0	0	0	0	0	9	CA
															1	AN
															1	DM
5053	Take-away	P	3042.7	1115.6	0	0	2991.9	1113.7	0	0	0	0	50.8	1.9	260	CA
															2	AN
															3	DM
															7	DM
5056	Lower Lake Coulee	P	1225.4	0	0	0	944.7	0	280.7	0	0	0	0	0	50	CA
															1	AN
															3	DM
5058	North Dibble Coulee	P	670.9	1048.6	0	0	670.9	1048.6	0	0	0	0	0	0	3	CA
															60	CA
															63	CA
															60	CA
															1	AN
															2	DM

SEASON OF USE	CURRENT ALMS		REC. STOCKING		POTEN. FORAGE		ALTERNATIVE A ENHANC. COMBINED		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LUST. FORAGE		ALTERNATIVE D ENHANCED NUTRITION/LIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LR	ST	LR	ST	LR	ST	LR	ST	LR	ST	LR
	01/01-02/28	05/15-11/14	04/01-03/31	04/01-11/30	12/01-03/31	03/01-02/28	04/01-03/31	04/01-03/31	03/01-02/28	04/01-03/31	04/01-03/31	03/01-02/28	04/01-03/31	04/01-03/31	03/01-02/28	04/01-03/31	04/01-03/31	03/01-02/28
01/01-02/28	696	510	1015	553	1447	894	696	649	696	696	1015	1305	515	515	0	0	696	696
03/01-02/28			145	256	218	353	110	134	110	110	145	264	74	79	0	0	110	110
04/01-03/31			2															
04/01-03/31			2															
03/01-02/28	299	184	378	385	548	594	299	365	299	299	378	549	216	219	0	0	299	299
04/01-03/31																		
03/01-02/28																		
04/01-03/31																		
03/01-02/28	227		249	0	405	0	227	277	227	227	249	537	148	215	0	0	227	227
04/01-03/31																		
03/01-02/28	1391	345	1647	330	2470	475	1391	1697	1391	1391	1647	1731	863	998	0	0	1391	1391
04/01-03/31																		
03/01-02/28	1122	259	1470	349	2041	491	1122	1368	1122	1122	1470	2671	1016	1019	0	0	1122	1122
04/01-03/31																		
03/01-02/28	266		370	341	497	457	266	325	266	266	370	686	178	178	0	0	266	266
04/01-03/31																		
03/01-02/28	1078	435	1701	690	2276	935	1078	1315	1078	1078	1701	3324	764	764	0	0	1078	1078
04/01-03/31																		
03/01-02/28	481	217	764	320	1020	427	481	587	481	481	764	1504	291	291	0	0	481	481
04/01-03/31																		
03/01-02/28	2414	708	3070	1014	4357	1412	2414	2945	2414	2414	3070	5901	1646	1646	0	0	2414	2414
04/01-03/31																		
03/01-02/28	14																	
04/01-03/31																		
03/01-02/28	385	75	572	115	764	154	385	470	385	385	572	593	132	132	0	0	385	385
04/01-03/31																		
03/01-02/28	97	20	171	0	249	0	97	118	97	97	171	346	37	37	0	0	97	97
04/01-03/31																		
03/01-02/28	1404	852	1679	1235	2303	1684	1404	1713	1404	1404	1679	2920	973	982	0	0	1404	1404
04/01-03/31																		
03/01-02/28	27	379	27	0	40	0	27	33	27	27	27	38	17	22	0	0	27	27
04/01-03/31																		
03/01-02/28	109		116	0	156	0	109	133	109	109	116	208	73	73	0	0	109	109
04/01-03/31																		
03/01-02/28	509	242	708	275	954	369	509	621	509	509	708	1190	427	434	0	0	509	509
04/01-03/31																		
03/01-02/28	229		309	0	448	0	229	279	229	229	309	592	129	136	0	0	229	229
04/01-03/31																		
03/01-02/28	131	135	199	311	265	414	131	160	131	131	199	398	79	79	0	0	131	131
04/01-03/31																		

PHILLIPS RESOURCE AREA PROPOSED ANP% CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5059	Dibble Coulee	P	2157.9	3473.7	0	0	1673.4	3473.7	282.3	0	0	0	0	0	46 102 101 2 5	CA CA CA AN DM
5063	Sink Coulee	P	1125.8	697.7	0	0	509.5	233.7	616.3	464.0	0	0	0	0	7 47 9 3	CA CA AN DM
5064	Whitewater	P	1461.9	279.1	0	0	1461.9	279.1	0	0	0	0	0	0	2 50 1 3	CA CA AN DM
5066	Provost Coulee	P	2378.9	319.8	0	0	1949.1	236.9	624.7	82.9	0	0	5.1	0	20 110 130 2 6	CA CA CA AN DM
5067	Lone Tree	P	754.3	40.0	0	0	741.5	39.7	0	0	0	0	12.8	0	20 110 1 2	CA CA AN DM
5069	Westfork Stinky	P	1649.9	0	0	0	1649.9	0	0	0	0	0	0	0	75 1 4	CA AN DM
5070	Stinky Creek	P	719.7	326.8	0	0	218.5	0	476.7	315.2	0	0	24.5	11.6	8 1 1	CA AN DM
5071	Turkey Track	P	6494.9	3986.3	0	0	6336.8	3952.8	0	0	0	0	158.1	33.5	115 42 98 98 27 68 38 38 44 38 4 14	CA CA CA CA CA CA CA CA CA CA AN DM
5072	Upper E. Fork Stinky	P	589.7	0	0	0	589.7	0	0	0	0	0	0	0	10 1 1	CA AN DM
5073	Klond Coulee	P	2042.3	2621.4	0	0	1623.9	2328.3	0	0	0	0	416.4	293.1	1 101 10 1 11 8	CA CA AN AN DM DM
5074	Corral Coulee	P	320.0	0	0	0	0	0	320.0	0	0	0	0	0	6 1 1 2	CA AN DM DM
5075	Two Mile Coulee	P	2950.9	3300.0	0	0	2406.7	2629.2	133.6	407.8	0	0	410.4	263.0	3 565 286 16 16 310 83 2 13 16	HO CA CA CA CA CA AN AN DM DM
5076	Panhandle Coulee	P	784.1	0	0	0	237.7	0	514.2	0	0	0	32.2	0	12 7 1 7 4	CA AN AN DM DM
5078	Rattlesnake Coulee	P	312	110.9	0	0	64.0	6.0	248.0	104.9	0	0	0	0	5 1 1	CA AN DM
5080	E. Fork Stinky Coulee	P	1973.7	4114.6	0	0	1302.1	1778.9	640.0	2310.6	0	0	31.6	25.1	1 175 1 3 11	CA CA AN DM DM
5086	Lower Coop Coulee	P	2892.1	399.6	0	0	2428.6	399.6	463.5	0	0	0	0	0	1 100 68 120 100 2 4 15	CA CA CA CA CA AN DM DM

SEASON OF USE	CURRENT AIMS		REC. STOCKING		FOTEN. FORAGE		ALTERNATIVE A ENHANC. COMBINED VEG. USES		ALTERNATIVE B COVT. OR PRESENT MGMT.		ALTERNATIVE C ENHANCED LVS/L. FORAGE		ALTERNATIVE D ENHANCED MATS/RAVTL/DL/TF		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
	451	687	533	1007	745	1346	451	550	451	451	533	886	322	322	ST	LT	451	451
03/20-09/20																		
05/15-06/01																		
06/22-10/15																		
05/10-10/10																		
04/01-03/31		3																
04/01-03/31		12																
03/01-02/28	204	102	260	152	421	260	204	302	204	204	260	510	123	188			204	204
03/01-09/18																		
04/01-03/31		14																
04/01-03/31		7																
03/01-02/28	256	40	419	88	559	116	256	312	256	256	419	637	116	116			256	256
04/26-10-11																		
04/01-03/31		2																
04/01-03/31		7																
06/02-06/21	520	67	636	76	934	112	520	634	520	520	636	1151	345	366			520	520
05/01-06/20																		
07/20-10/18																		
04/01-03/31		3																
04/01-03/31		14																
05/01-06/01	130	5	187	10	251	14	130	159	130	130	187	313	111	116			130	130
11/10-12/10																		
04/01-03/31		2																
04/01-03/31		5																
05/01-10/09	398		460	0	617	0	398	486	398	398	460	855	254	254			398	398
04/01-03/31		2																
04/01-03/31		10																
03/01-02/28	99		126	47	219	94	99	157	99	99	126	207	67	105			99	99
04/01-03/31		2																
04/01-03/31		2																
07/01-09/30	1182	921	1653	1069	2216	1431	1182	1442	1182	1182	1653	2738	913	1085			1182	1182
05/23-10/22																		
05/10-06/15																		
07/16-10/15																		
07/15-09/28																		
05/16-10/31																		
05/16-06/27																		
07/18-10/31																		
05/15-10/19																		
05/16-10/15																		
04/01-03/31		6																
04/01-03/31		34																
03/01-02/28	122		170	0	277	0	122	149	122	122	170	335	82	82			122	122
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28	181	325	363	604	485	805	181	221	181	181	363	489	112	169			181	181
05/04-10/01																		
12/01-02/31		2																
04/01-11/30		6																
12/01-11/30		26																
12/01-03/31		6																
03/01-02/28	73		53	0	107	0	73	132	73	73	53	141	49	88			73	73
04/01-03/31		2																
12/01-03/31		1																
04/01-11/30		5																
03/01-02/28	303	1939	547	721	748	1010	303	370	303	303	547	776	173	220			303	303
03/01-03/31																		
04/01-05/09																		
05/10-06/27																		
09/01-10/31																		
04/01-11/30																		
11/01-02/28		44																
12/01-03/31		3																
04/01-11/30		12																
12/01-03/31		38																
04/01-11/30	142		144	0	251	0	142	200	142	142	144	240	94	132			142	142
03/01-02/28		4																
12/01-03/31		2																
04/01-11/30		6																
12/01-03/31		10																
04/01-11/30	60		66	22	120	42	60	111	60	60	66	134	40	74			60	60
03/01-02/28		2																
04/01-03/31		2																
04/01-03/31	431	627	433	903	667	1512	431	526	431	431	433	740	268	320			431	431
03/01-02/28																		
05/01-10/29		2																
04/01-03/31		2																
12/01-03/31		26																
04/01-11/30	557	117	749	114	1053	153	557	675	557	557	749	1440	291	291			557	557
03/01-02/28																		
04/15-05/06																		
04/28-10/31																		
11/01-11/17																		
11/01-11/30		3																
04/01-03/31		3																
12/01-03/31		36																

PHILLIPS RESOURCE AREA PROPOSED AND% CONTINUED

ALLLOT. NO.	ALLOTMENT NAME	MCT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5088	Lower Lash Coulee	P	660.8	0	0	0	575.3	0	85.5	0	0	0	0	0	21	CA AN DM
5090	Lash Coulee	P	239.6	0	0	0	239.6	0	0	0	0	0	0	0	5	CA AN DM
5091	Belle Coulee	P	1021.9	905.6	0	0	997.5	877.7	0	0	0	0	24.4	27.9	3	CA CA AN DM DM
5092	Mount Coulee	P	215.4	0	0	0	213.3	0	0	0	0	0	2.1	0	3	CA AN DM DM
5097	Black Coulee	P	3211.8	1362.6	0	0	2447.0	1105.2	685.4	230.0	0	0	79.4	27.4	40	CA CA AN DM DM
5100	Mud Creek	P	1714.4	150.0	0	0	654.6	0	1059.8	150.0	0	0	0	0	76	CA AN DM
5101	Upper Mud Creek	P	879.5	0	0	0	762.6	0	116.9	0	0	0	0	0	75	CA AN CA AN DM
5104	Merson Coulee	P	3634.0	3231.9	0	0	2713.1	1530.0	822.1	1630.4	0	0	0	0	13	CA CA AN DM DM
5106	Shad Coulee	P	781.1	921.3	0	0	693.8	655.5	68.8	266.0	0	0	18.5	0	52	CA AN DM DM
5107	Garland Creek	P	4567.9	1469.3	0	0	4189.7	1193.9	145.6	242.9	0	0	232.6	32.5	3	CA CA AN DM DM
5108	Davenport Coulee	P	966.1	0	0	0	844.7	0	84.0	0	0	0	37.4	0	2	CA CA AN AN DM DM
5112	Bughouse Coulee	P	1836.2	6668.0	0	0	1668.4	6046.2	79.9	402.6	56.8	16.8	31.1	202.4	52	CA AN AN DM DM
5116	Alkali Coulee	P	3519.1	1925.4	0	0	2836.1	758.3	668.3	1167.1	0	0	14.7	0	18	CA CA BO AN AN DM
5122	Rock Coulee	P	823.3	598.3	0	0	153.7	206.6	614.4	362.6	0	0	55.2	29.1	1	CA CA AN DM DM
5127	Dry Stinky Coulee	P	349.6	0	0	0	136.7	0	212.9	0	0	0	0	0	4	CA AN DM DM
5129	Lower White Water	P	319.5	212.9	0	0	319.5	212.9	0	0	0	0	0	0	5	CA AN DM DM
5130	Horse Camp Coulee	P	6018.0	3075.1	0	0	5613.5	2943.7	112.9	20.9	0	0	291.6	110.5	200	CA CA AN AN DM DM
5131	Basin Coulee	P	3175.8	708.5	0	0	3129.6	708.5	46.0	0	0	0	.2	0	5	CA CA AN AN DM

SEASON OF USE	CURRENT AUMs		REG. STOCKING		POTEN. FORAGE		ALTERNATIVE A ENHANC. COMBINED		ALTERNATIVE B CONT. OR PRESENT MGMT.		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION			
	BLM	OTHER	RATE/AUMs		PRODUCTION		VRS. USES		ST		ST		ST		ST		ST			
			BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT		
03/01-10/31	128				171	0	238	0	128	156	128	128	171	287	86	86			128	128
04/01-03/31	2																			
03/01-02/28	59		62	0	84	0		59	72	59	59	62	103	39	39				59	59
04/01-03/31	2																			
03/01-02/28	186	489	269	235	361	315		186	227	186	186	269	537	63	64				186	186
06/01-07/15																				
04/01-03/31	2																			
12/01-03/31	4																			
04/01-11/30	5																			
03/01-02/28	37		57	0	76	0		37	45	37	37	57	107	25	25				37	37
04/01-03/31	2																			
12/01-03/31	1																			
04/01-11/30	2																			
05/01-11/30	750	318	728	312	1067	445		750	915	750	750	750	1209	502	536				750	750
04/25-11/25																				
04/01-03/31	8																			
04/01-11/30	22																			
12/01-03/31	5																			
05/01-09/30	340	37	367	25	614	50		340	515	340	340	367	773	203	319				340	340
04/01-03/31	2																			
04/01-03/31	10																			
05/15-06/25	197		247	0	344	0		197	240	197	197	247	479	91	91				197	197
06/26-08/14																				
08/15-09/04																				
04/01-03/31	2																			
04/01-03/31	5																			
03/01-02/28	675	630	776	0	1144	1093		675	824	675	824	776	1190	646	703				675	675
07/01-11/30	5																			
04/01-03/31	5																			
01/1-11/31	14																			
12/01-03/31	15																			
05/01-11/15	138	202	183	210	254	314		138	168	138	138	183	259	95	105				138	138
04/01-03/31	2																			
04/01-11/30	3																			
12/01-03/31	4																			
03/01-02/21	799	334	1046	390	1418	549		799	975	799	799	1046	1614	504	565				799	799
05/01-06/16																				
06/17-12/02																				
04/01-03/31	6																			
04/01-11/30	18																			
12/01-03/31	23																			
03/01-02/28	158		183	210	254	314		158	193	158	158	225	368	104	112				158	158
05/01-10/31																				
04/01-11/30	1																			
12/01-03/31	1																			
04/01-11/30	5																			
12/01-03/31	5																			
05/01-10/31	309		473	1702	673	2325		309	377	309	309	473	813	200	208				309	309
04/01-11/30	1																			
12/01-03/31	9																			
04/01-11/30	6																			
12/01-03/31	2																			
03/01-02/28	772	414	927	387	1317	631		772	942	772	772	927	1795	576	587				772	772
05/15-11/15																				
05/15-11/15																				
04/01-11/30	3																			
12/01-03/31	9																			
04/01-03/31	19																			
03/01-02/28	98	58	140	112	249	188		98	153	98	98	140	211	95	131				98	98
08/01-09/19																				
04/01-03/31	2																			
04/01-11/30	8																			
12/01-03/31	4																			
03/01-02/28	51		77	0	129	0		51	94	51	51	77	148	35	63				51	51
04/01-03/31	2																			
04/01-03/31	2																			
03/01-02/28	57		87	59	117	79		57	70	57	57	87	136	37	39				57	57
04/01-03/31	2																			
04/01-03/31	2																			
04/15-05/14	802	436	1391	764	1872	1024		801	978	802	802	1391	2078	284	372				802	802
05/15-09/15																				
04/01-11/30	5																			
12/01-03/31	30																			
04/01-11/30	22																			
12/01-03/31	16																			
03/01-02/28	731	396	914	206	1228	276		731	892	731	731	914	1774	410	410				731	731
04/07-06/14																				
04/01-11/30	3																			
12/01-03/31	17																			
04/01-03/31	17																			

PHILLIPS RESOURCE AREA PROPOSED AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MUT STS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5132	Assiniboine East	P	1006.6	325.7	0	0	1006.6	325.7	0	0	0	0	0	0	77	CA
															11	AN
															2	DM
5133	Assiniboine Creek	P	2713.5	1470.5	0	0	2063.9	737.1	626.2	709.6	0	0	23.4	3.8	1	CA
															168	CA
															2	AN
															31	AN
															7	DM
															7	DM
5134	Assiniboine West	P	275.7	0	0	0	275.7	0	0	0	0	0	0	0	5	CA
															1	AN
															3	AN
															1	DM
5135	South Fork Garland	P	396.5	0	0	0	396.5	0	0	0	0	0	0	0	7	CA
															1	AN
															1	DM
															1	DM
5136	Upper Garland Creek	P	366.0	0	0	0	366.0	0	0	0	0	0	0	0	7	CA
															1	AN
															1	DM
															2	DM
5144	Dodson Creek	P	4867.2	1689.7	0	0	4842.0	1689.7	2.8	0	0	0	22.4	0	13	CA
															157	CA
															510	CA
															200	CA
															250	CA
															4	AN
															12	DM
5150	Upper Exeter Creek	P	618.8	0	0	0	157.9	0	460.9	0	0	0	0	0	11	CA
															1	AN
															1	DM
5152	Exeter Creek	P	1316.4	317.8	0	0	1108.8	317.8	207.6	0	0	0	0	0	100	CA
															1	AN
															13	AN
															3	DM
															5	DM
5153	Wilson Coulee	P	4124.4	1060.2	0	0	3348.7	902.4	771.1	157.8	0	0	4.6	0	15	CA
															164	CA
															200	CA
															284	CA
															3	AN
															10	DM
5154	Dry Fork	P	2381.5	532.7	0	0	2227.7	370.7	83.8	156.7	0	0	70.0	5.3	4	CA
															80	CA
															36	CA
															58	CA
															2	AN
															27	AN
															6	DM
															10	DM
5155	Spring Coulee	P	2249.8	1562.7	0	0	1593.8	1464.1	597.8	76.0	0	0	58.2	22.6	5	CA
															80	CA
															180	CA
															2	AN
															26	AN
															5	DM
															7	DM
5301	Dry Lake	P	1208.4	0	0	0	1174.8	0	0	0	0	0	33.6	0	22	CA
															1	AN
															3	DM
5304	West Hewitt Lake	P	2752.5	2530.2	0	0	2310.0	1733.1	424.6	786.6	0	0	17.9	10.5	293	CA
															150	CA
															293	CA
															168	CA
															2	AN
															6	DM
5305	Lone Tree Sag	P	264.9	685.1	0	0	139.4	15.2	119.5	669.1	0	0	6.0	.8	5	CA
															1	AN
															2	DM
5306	North Hewitt Lake	P	324.6	0	0	0	320.1	0	0	0	0	0	4.5	0	6	CA
															1	AN
															1	DM
5307	Big Bend	P	2214.1	1136.5	0	0	2125.4	1079.9	49.8	40.0	0	0	38.9	16.6	217	CA
															1	CA
															2	AN
															5	DM
5309	South Hewitt Lake	P	800.5	0	0	0	751.7	0	49.0	0	0	0	8.8	0	17	CA
															1	AN
															2	DM

SEASON OF USE	CURRENT AUMS		REC. STOCKING RATE/AUMS		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED VTC. USES		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATER/HL/LIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
06/30-10/31	200	63	276	89	370	119	200	244	200	200	276	496	200	229			200	200
04/01-11/30	1																	
12/01-03/31	6																	
04/01-03/31	5																	
03/01-02/28	566	316	647	332	950	539	566	690	566	566	647	1083	434	452			566	566
03/25-10/31																		
04/01-11/30	2																	
12/01-03/31	16																	
04/01-11/30	11																	
12/01-03/31	6																	
03/01-02/28	61		95	0	126	0	61	74	61	61	95	170	41	102			61	61
04/01-11/30	1																	
12/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	81		111	0	149	0	81	99	81	81	111	206	53	53			81	81
04/01-11/30	2																	
12/01-03/31	1																	
03/01-02/28	87		108	0	145	0	87	106	87	87	108	216	59	59			87	87
04/01-03/31	2																	
04/01-11/30	2																	
12/01-03/31	2																	
03/01-02/28	964	436	1263	513	1698	688	964	1176	964	964	1263	2144	928	940			964	964
07/15-08/23																		
07/14-07/31																		
08/24-10/09																		
08/16-11/10																		
04/01-03/31	6																	
04/01-03/31	29																	
03/01-02/28	134		130	0	228	0	134	160	134	134	134	284	87	105			134	134
04/01-03/31	2																	
04/01 03/31	2																	
05/01-08/15	284	71	334	78	480	105	284	347	284	284	334	691	124	124			284	284
04/01-11/30	1																	
12/01-03/31	7																	
04/01-11/30	5																	
12/01-03/31	4																	
03/01-02/28	892	202	1098	278	1315	395	892	1088	892	892	1098	1943	530	530			892	892
08/16-08/15																		
03/01-08/15																		
11/03-12/02																		
04/01-03/31	5																	
04/01-03/31	24																	
03/01-02/28	421	113	587	133	799	199	421	514	421	421	587	889	273	273			421	421
04/01-04/30																		
04/15-12/15																		
10/01-11/30																		
04/01-11/30	2																	
12/01-03/31	14																	
04/01-11/30	10																	
12/01-03/31	8																	
03/01-02/28	416	266	528	381	783	522	416	620	416	416	528	898	160	196			416	416
04/15-04/30																		
05/01-08/08																		
04/01-11/30	2																	
12/01-03/31	14																	
04/01-11/30	8																	
12/01-03/31	6																	
03/01-02/28	257		351	0	469	0	257	314	257	257	351	444	169	178			257	257
04/01-03/31	2																	
04/01-03/31	7																	
05/01-06/30	643	850	677	601	952	882	643	784	643	643	677	1102	392	398			643	643
07/01-08/15																		
08/16-09/30																		
10/01-11/15																		
04/01-03/31	3																	
04/01-03/31	14																	
03/01-02/28	55		50	112	79	221	55	85	55	55	55	98	35	55			55	55
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	71		80	0	107	0	71	87	71	71	80	98	47	49			71	71
04/01-03/31	2																	
04/01-03/31	2																	
11/01-02/28	540	350	542	298	732	402	540	659	540	540	542	819	538	557			540	540
03/01-02/28																		
04/01-03/31	3																	
04/01-03/31	12																	
03/01-02/28	203		202	0	276	0	203	248	203	203	203	354	135	138			203	203
04/01-03/31	2																	
04/01-03/31	5																	

PHILLIPS RESOURCE AREA PROPOSED AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MUT STS	ACRES		EXCELLENT				GOOD				RANGE CONDITION FAIR				POOR				UNSUITABLE				GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5310	North Nelson	P	198.5	0	0	0	0	0	0	0	0	0	198.5	0	0	0	0	0	0	0	0	0	0	0	3 1 AN 1 DM	
5312	Saco Dump	P	1256.9	0	0	0	0	0	436.4	0	0	0	772.0	0	0	0	0	0	0	0	48.5	0	0	0	4 CA 47 CA 2 AN 3 DM	
5315	Saco	P	1814.4	5633.3	0	0	0	0	1524.7	4503.0	176.9	1000.2	0	0	0	0	0	0	0	0	112.8	130.1	0	0	215 CA 44 CA 2 AN 5 DM	
5316	Saco Hills	P	5478.6	2020.3	0	0	0	0	4036.6	827.5	1094.6	1151.1	0	0	0	0	0	0	0	0	347.4	41.7	0	0	205 CA 7 AN 5 DM 13 DM	
5319	Upper Second Creek	P	2502.3	389.8	0	0	0	0	2167.4	374.5	252.7	6.9	0	0	0	0	0	0	0	0	82.2	8.4	0	0	130 CA 14 CA 4 AN 7 DM	
5320	Thomas Coulee	P	2555.6	1958.0	0	0	0	0	2316.3	1162.0	0	0	0	0	0	0	0	0	0	0	239.3	796.0	0	0	2 CA 318 CA 4 AN 8 DM 6 DM	
5322	South Nelson Res.	P	360	0	0	0	0	0	0	0	360.0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 HO 77 CA 1 AN 1 DM	
5323	Upper Delaney Coulee	P	319.8	182.9	0	0	0	0	319.8	182.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6 CA 1 AN 1 DM	
5324	North Rowdoin	P	1882.5	1274.6	0	0	0	0	827.7	151.5	1039.6	1119.4	0	0	0	0	0	0	0	0	15.2	3.7	0	0	11 CA 22 CA 160 CA 2 AN 2 DM 2 DM	
5325	Horse Camp Coulee	P	1278.3	684.9	0	0	0	0	1214.6	680.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21 CA 1 AN 3 DM	
5328	Rocky Point	P	1808.7	376.0	0	0	0	0	1007.8	0	799.7	376.0	0	0	0	0	0	0	0	0	1.2	0	0	0	4 CA 54 CA 40 CA 2 AN 4 DM	
5331	Gravel Coulee	P	439.2	292.9	0	0	0	0	78.0	0	361.2	292.9	0	0	0	0	0	0	0	0	0	0	0	0	7 CA 1 AN 2 DM	
5332	Dodson Canal	P	699.7	0	0	0	0	0	16.9	0	682.8	0	0	0	0	0	0	0	0	0	0	0	0	0	3 CA 75 CA 1 AN 2 DM	
5334	Lower Alkali Coulee	P	252	0	0	0	0	0	130.0	0	122.0	0	0	0	0	0	0	0	0	0	0	0	0	0	4 CA 1 AN 1 DM	
5336	South Rowdoin	P	739.8	672.9	0	0	0	0	640.5	534.9	58.0	118.0	0	0	0	0	0	0	0	0	41.3	20.0	0	0	1 CA 55 CA 1 AN 2 DM	
5343	Thiel Creek	P	1968.1	0	0	0	0	0	1887.0	0	16.9	0	0	0	0	0	0	0	0	0	64.2	0	0	0	36 CA 2 AN 4 DM	
5349	Upper Moss Coulee	P	3401.6	932.3	94.2	118.4	3037.7	762.6	0	0	0	0	0	0	0	0	0	0	0	0	269.7	51.3	0	0	402 CA 1 CA 4 AN 8 DM	
5351	Reigel Coulee	P	3392.6	5080.8	0	0	0	0	3172.1	4556.8	191.8	508.3	0	0	0	0	0	0	0	0	28.7	15.7	0	0	306 CA 245 CA 600 CA 4 AN 8 DM	
5352	Moss Coulee	P	960.7	0	0	0	0	0	893.8	0	66.9	0	0	0	0	0	0	0	0	0	0	0	0	0	56 CA 1 AN 2 DM	
5353	Lower Moss Coulee	P	2851.2	0	764.8	0	1910.8	0	0	180.4	0	0	0	0	0	0	0	0	0	0	5.2	0	0	0	14 CA 96 CA 4 AN 7 DM	

SEASON OF USE	CURRENT ADMS BLM OTHER	REC. STOCKING		POTEN. PORAGE		ALTERNATIVE A ENHANC. COMBINED		ALTERNATIVE B CONT. OF		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK		ALTERNATIVE F NO ACTION	
		RATE/ADMS		PRODUCTION		VEG. USES		PRESENT MGMT.		LIVST. PORAGE		WATER/WILDLIFE		GRAZING			
		BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	34																
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	262	269	224	0	387	0	262	320	262	262	224	376	195	270		262	262
04/01-08/26																	
04/01-03/31	3																
04/01-03/31	7																
05/01-11/11	388	1065	371	1184	518	1707	388	473	388	388	371	439	266	269		388	388
06/10-10/13																	
04/01-03/31	3																
04/01-03/31	12																
05/01-10/31	868	366	1002	360	1444	592	868	1059	868	868	1002	1242	581	654		868	868
04/01-03/31	1																
04/01-11/30	14																
12/01-03/31	10																
06/01-09/11	611	53	558	91	780	123	611	745	611	611	558	855	417	439		611	611
03/01-02/28	6																
04/01-03/31	17																
04/01-03/31	0																
04/01-03/31	334	321	485	238	646	317	334	407	334	334	485	552	326	384		334	334
03/01-02/28																	
09/01-10/31	6																
04/01-03/31	6																
12/01-03/31	10																
03/01-02/28	92		68	0	137	0	92	112	92	92	68	167	67	67		92	92
03/01-02/28																	
04/01-03/31	2																
04/01-03/31																	
03/01-02/28	74		83	0	137	0	74	90	74	74	83	145	50	50		74	74
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	405	237	381	216	624	406	405	549	405	405	405	704	339	434		405	405
05/16-09/30																	
04/15-09/11																	
04/01-03/31	3																
04/01-11/30	8																
12/01-03/31	2																
03/01-02/28	244		303	197	406	263	244	298	244	244	303	436	160	192		244	244
04/01-03/31	2																
04/01-03/31	7																
03/01-02/28	382	362	395	63	631	126	382	503	382	382	395	851	278	358		382	382
05/01-09/13																	
03/01-10/21																	
04/01-03/31	3																
04/01-03/31	10																
03/01-02/28	85		89	54	162	108	85	142	85	85	89	187	57	95		85	85
04/01-03/31	2																
04/01-03/31	5																
03/01-02/28	112		150	0	288	0	112	265	112	112	150	342	62	163		112	112
06/15-07/14																	
04/01-03/31	2																
04/01-03/31	5																
03/01-02/28	46		59	0	94	0	46	65	46	46	59	120	30	43		46	46
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	136	88	151	139	208	199	136	166	136	136	151	228	69	79		136	136
05/01-08/02																	
04/01-03/31	2																
04/01-03/31	5																
03/01-02/28	422		475	0	641	0	422	515	422	422	475	736	278	288		422	422
04/01-03/31	3																
04/01-03/31	10																
08/01-09/30	629	183	699	206	930	267	629	767	629	629	699	942	629	720		629	629
03/01-02/28																	
04/01-03/31	6																
04/01-03/31	19																
04/01-05/06	820	1343	841	1239	1155	1714	820	1000	820	820	841	1370	303	303		820	820
05/01-11/06																	
11/07-12/06																	
04/01-03/31	6																
04/01-03/31	19																
06/01-10/01	218		243	0	355	0	218	266	218	218	243	398	173	173		218	218
04/01-03/31	2																
04/01-03/31	5																
03/01-02/28	454		742	113	894	172	454	533	454	454	742	814	384	394		454	454
07/01-09/30																	
04/01-03/31	6																
04/01-03/31	17																

PHILLIPS RESOURCE AREA PROPOSED ANPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CIS
5354	Gaston Coulee	P	4681.9	836.7	0	0	4646.1	711.0	0	106.0	0	0	35.8	19.7	31	CA
															37	CA
															202	CA
															6	AN
															11	DM
5355	S. Alkali Lake Coulee	P	973.3	0	0	0	973.3	0	0	0	0	0	0	0	40	CA
															1	AN
															2	DM
5356	Lenoir Coulee	P	319.6	0	0	0	319.6	0	0	0	0	0	0	0	5	CA
															1	AN
															1	DM
5357	Rock Corral	P	1528.3	0	0	0	903.9	0	575.7	0	40.9	0	7.8	0	23	CA
															2	AN
															3	DM
5359	Upper Tettruit Coulee	P	639.6	435.8	0	0	598.7	435.8	40.9	0	0	0	0	0	2	CA
															54	CA
															1	AN
															2	DM
5361	Gonzales Coulee	P	655.6	114.9	0	0	655.6	114.9	0	0	0	0	0	0	45	CA
															1	AN
															2	DM
5362	Upper Gonzales Coulee	P	170.8	0	0	0	69.0	0	101.8	0	0	0	0	0	4	CA
															1	AN
															1	DM
5369	South Alkali	P	2919.9	1176.2	0	0	2449.8	1075.6	444.3	97.9	0	0	25.8	2.7	200	CA
															6	CA
															4	AN
															7	DM
5371	East Bench	P	319.3	0	0	0	319.3	0	0	0	0	0	0	0	30	CA
															1	AN
															1	DM
5373	Lower Halfway Coulee	P	639.5	40.0	0	0	129.0	0	510.5	40.0	0	0	0	0	31	CA
															1	AN
															2	DM
5376	Nice Pond	P	756.4	0	0	0	114.8	0	641.6	0	0	0	0	0	13	CA
															1	AN
															2	DM
5377	Northeast	P	166.9	0	0	0	0	0	166.9	0	0	0	0	0	45	SE
															1	AN
															1	DM
5378	Upper Wind Coulee	P	530.9	0	0	0	0	0	530.9	0	0	0	0	0	9	CA
															1	AN
															1	DM
5379	Wind Coulee	P	879.8	0	0	0	222.0	0	657.8	0	0	0	0	0	17	CA
															1	AN
															2	DM
5385	South Wild Horse	P	1763.6	1178.2	0	0	505.6	244.0	730.7	921.5	0	0	27.3	12.7	47	CA
															6	CA
															1	AN
															3	DM
5386	Tressler Coulee	P	4522.9	0	0	0	2711.8	0	1636.6	0	0	0	174.5	0	56	CA
															5	AN
															10	DM
5389	Upper Alkali Coulee	P	959.8	160.0	0	0	0	0	959.8	160.0	0	0	0	0	110	CA
															1	AN
															2	DM
5391	N. Overflood Coulee	P	639.8	0	0	0	0	0	639.8	0	0	0	0	0	12	CA
															1	AN
															2	DM
5392	Ant Reservoir	P	397.8	54.9	0	0	397.8	54.9	0	0	0	0	0	0	12	CA
															1	AN
															1	DM
5393	Smith Lake Coulee	P	639.9	0	0	0	387.0	0	252.9	0	0	0	0	0	10	CA
															1	AN
															2	DM
5394	Satin Reservoir	P	320.0	0	0	0	216.0	0	104.0	0	0	0	0	0	3	CA
															1	AN
															1	DM
5398	N. DBS Coulee	P	568.7	319.8	0	0	30.0	0	419.8	228.9	118.9	90.9	0	0	4	CA
															1	AN
															1	DM
5399	S. Fork Cottonwood	P	820.2	355.1	0	0	0	0	819.6	354.2	0	0	.6	1.6	21	CA
															2	AN
															3	DM

SEASON OF USE	CURRENT AUMs		REC. STOCKING		POTN. FORAGE		ALTERNATIVE A RANGE CONDITION		ALTERNATIVE B DOW. OF		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLM OTHER		RATE/AUMs		PRODUCTION		VEG. USES		PRESENT NMT.		LVST. FORAGE		WATER/LIVELIFE					
	ST	LT	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	766	71	1091	193	1488	263	766	867	766	766	1091	1323	576	576			766	766
04/15-09/18																		
07/01-08/14																		
04/01-03/31																		
04/01-03/31																		
06/01-09/15	141		273		362		141	172	141	141	273	303	121	121			141	141
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	63		89		119		63	77	63	63	89	162	38	38			63	63
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	274		337		531		274	334	274	274	337	529	205	205			274	274
04/01-03/31	3																	
04/01-03/31	7																	
03/01-02/28	139	102	171	110	234	149	139	170	139	139	171	308	71	71			139	139
03/01-08/30																		
04/01-03/31	2																	
04/01-03/31	3																	
06/15-08/10	173	26	179	30	240	40	173	211	173	173	179	310	136	136			173	173
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	47		39		65		47	57	47	47	39	83	31	41			47	47
04/01-03/31	2																	
04/01-03/31	2																	
06/01-09/05	517	257	750	302	1057	417	517	631	517	517	750	1385	99	99			517	517
03/01-02/28																		
04/01-03/31	6																	
04/01-03/31	7																	
05/01-10/15	68		86		116		68	83	68	68	86	150	43	44			68	68
04/01-03/31	2																	
04/01-03/31	2																	
06/01-09/24	114	6	120	6	214	13	114	140	114	114	120	263	90	144			114	114
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	160		215		363		160	195	160	160	215	396	111	165			160	160
04/01-03/31	2																	
04/01-03/31	5																	
05/01-07/30	27		33		65		27	33	27	27	33	81	26	51			27	27
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	105		101		202		105	231	105	105	101	258	69	152			105	105
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	198		187		330		198	242	198	198	198	441	130	216			198	198
04/01-03/31	2																	
04/01-03/31	5																	
04/15-10/15	176	181	188	178	325	331	176	282	176	176	188	342	106	176			176	176
03/01-02/28																		
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	668		834		1288		668	815	668	668	834	1697	558	678			668	668
04/01-03/31	8																	
04/01-03/31	24																	
06/05-08/14	220	37	154	25	307	50	220	268	220	220	154	373	138	254			220	220
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	137		108		217		137	168	137	137	108	266	89	172			137	137
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	139		113	16	151	21	139	170	139	139	113	174	91	91			139	139
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	116		185		278		116	142	116	116	185	350	76	121			116	116
04/01-03/31	2																	
04/01-03/31	9																	
03/01-02/28	38		84		126		38	46	38	38	84	169	26	31			38	38
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	43		83	44	179	101	43	71	43	43	83	117	27	45			43	43
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	247		130	58	259	117	247	342	247	247	130	249	163	226			247	247
04/01-03/31	3																	
04/01-03/31	7																	

PHILLIPS RESOURCE AREA PROPOSED AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		POOR		POOR		UNUSABLE		CRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
			983.2	783.4	0	0	983.2	783.4	0	0	0	0	0	0	13	CA
5400	N. Fork Cottonwood	P													1	AN
															2	DM
5401	Seven Mile Coulee	P	633.3	113.3	0	0	0	0	611.6	112.9	0	0	21.7	.4	11	CA
															1	AN
															2	DM
5402	Lower Seven Mile	P	2258.6	0	0	0	2152.1	0	103.3	0	0	0	3.2	0	118	CA
															3	AN
															5	DM
5404	Cottonwood Coulee	P	410.6	0	0	0	344.6	0	66.0	0	0	0	0	0	7	CA
															1	AN
															1	DM
5405	Lower Cottonwood	P	7122.3	2126.8	36	134.5	6784.6	1929.9	184.0	16.7	0	0	117.7	45.7	16	CA
															300	CA
															360	CA
															400	CA
															6	AN
															12	DM
5409	Lower DHS Coulee	P	573.6	8.0	0	0	29.6	0	544.0	8.0	0	0	0	0	9	CA
															1	AN
															1	DM
5410	DHS Creek	P	716.9	0	0	0	0	0	716.9	0	0	0	0	0	11	CA
															1	AN
															2	DM
5411	Beaver Creek	P	5031.0	1721.3	0	0	3443.0	985.9	1353.8	610.8	0	0	234.2	124.6	8	CA
															219	CA
															6	AN
															12	DM
5413	Armstrong Coulee	P	2906.9	3756.9	0	0	2906.9	3756.9	0	0	0	0	0	0	8	CA
															200	CA
															4	AN
															7	DM
5414	Smith Coulee	P	2499.2	268.9	0	0	2271.0	268.9	74.9	0	0	0	153.0	0	10	CA
															40	CA
															3	AN
															6	DM
5419	N. Cabbage Coulee	P	692.6	399.9	0	0	687.7	383.9	0	0	0	16.0	4.9	0	2	CA
															57	CA
															1	AN
															2	DM
5420	Big Horn Springs Creek	P	1128.7	395.8	0	0	840.2	218.8	234.0	174.9	0	0	54.5	2.1	5	CA
															114	CA
															1	AN
															3	DM
5423	S. Spring Coulee	P	521.9	0	0	0	139.0	0	382.9	0	0	0	0	0	8	CA
															1	AN
															1	DM
5426	Alkali Coulee	P	4520.4	1160.1	0	0	4231.4	1160.1	283.6	0	0	0	5.4	0	9	CA
															122	CA
															140	CA
															59	CA
															6	AN
															11	DM
5430	Tallow Creek	P	1151.5	0	0	0	244.8	0	906.7	0	0	0	0	0	17	CA
															1	AN
															3	DM
5436	Lone Horse Coulee	P	6919.3	1113.6	0	0	4264.2	677.6	1346.2	228.9	0	0	1508.9	207.1	27	CA
															100	CA
															130	CA
															30	CA
															130	CA
															30	CA
															9	AN
															16	DM
5442	Mickey Reservoir	P	2995.6	0	0	0	2888.2	0	67.8	0	0	0	39.6	0	43	CA
															18	CA
															10	CA
															60	CA
															22	CA
															4	AN
															7	DM

SEASON OF USE	CURRENT AIMS		SEC. STOCKING RATE/AIMS		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED VEG. USES		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATER/WILDLIFE		ALTERNATIVE E NO LIVESTOCK CRATING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	153		243	187	328	252	155	189	155	155	243	585	103	103			155	155
04/01-02/28	2																	
04/01-03/31	5																	
03/01-02/28	128		101	17	202	33	128	208	128	128	128	225	84	139			128	128
04/01-03/31	2																	
04/01-03/31	5																	
07/01-09/30	352		622		840		352	429	352	352	622	1024	352	352			352	352
04/01-03/31	5																	
04/01-03/31	12																	
03/01-02/28	76		94		134		76	93	76	76	94	185	55	55			76	76
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	1156	422	1731	558	2323	734	1156	1542	1156	1156	1731	2646	646	858			1156	1156
05/15-05/30																		
06/01-07/31																		
11/01-12/07																		
04/01-03/31	9																	
04/01-03/31	29																	
03/01-02/28	108		100	1	193	3	108	177	108	108	100	198	63	112			108	108
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	135	57	113		226		135	269	135	135	113	281	26	114			135	135
04/01-03/31	5																	
04/01-03/31	5																	
03/01-02/28	647	552	967	317	1435	489	647	792	647	647	967	1668	140	179			647	647
06/01-10/31																		
04/01-03/31	9																	
04/01-03/31	29																	
03/01-02/28	485	134	679	876	918	1184	485	544	485	485	679	1190	231	231			485	485
05/01-06/31	6																	
04/01-03/31	17																	
03/01-02/28	286	49	531	67	721	85	286	349	286	286	531	866	190	246			286	286
05/15-10/27																		
04/01-03/31	5																	
04/01-03/31	14																	
03/01-02/28	107	69	150	9	202	123	107	131	107	107	150	288	102	102			107	107
07/01-09/28																		
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	179	111	237	83	349	131	179	218	179	179	237	459	167	203			179	179
07/22-09/21																		
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	90		102		175		90	134	90	90	102	204	70	99			90	90
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	872	212	1063	278	1464	375	872	1064	872	872	1063	2134	681	681			872	872
06/09-07/31																		
08/01-10/15																		
05/01-11/30																		
04/01-03/31	9																	
04/01-03/31	26																	
03/01-02/28	199		202		364		199	312	199	199	202	367	131	206			199	199
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	765	88	1058	174	1548	256	765	1007	765	765	1058	1326	434	594			765	765
05/12-05/31																		
06/01-06/30																		
07/01-07/31																		
08/01-09/30																		
10/01-11/30																		
04/01-03/31	14																	
04/01-03/31	38																	
05/01-10/31	602		713		967		602	734	602	602	713	1364	392	397			602	602
07/15-10/15																		
05/01-05/31																		
06/01-06/01																		
05/01-11/30																		
04/01-03/31	6																	
04/01-03/31	17																	

PHILLIPS RESOURCE AREA PROPOSED AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5444	Scott Coulee	P	2617.8	1868.1	0	0	2617.8	1868.1	0	0	0	0	0	0	128	CA
															20	CA
															20	CA
															195	CA
															3	AN
															6	DM
5446	Parrot Coulee	P	2737.2	168.6	0	0	2041.4	103.8	601.2	57.7	44.6	0	50.0	7.1	7	CA
															108	CA
															3	AN
															6	DM
5460	Horse Pasture	P	4712.7	1944.3	0	0	4100.3	1912.2	107.8	2.9	0	0	504.6	29.2	120	CA
															47	CA
															6	AN
															11	DM
5461	South Armstrong	P	675.8	956.5	0	0	600.8	913.5	75.0	43.0	0	0	0	0	55	CA
															1	AN
															2	DM
5600	Parrot Lake	P	3770.4	0	0	0	1969.2	0	1711.7	0	0	0	89.5	0	60	CA
															5	AN
															9	DM
SUB TOTAL			322130	130581	895.0	253	259165	102759	52729	24090	639	124	8702	3355		

SEASON OF USE	CURRENT ALPS		REC. STOCKING		POTEN. FORAGE		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
	BLM OTHER		RATE/ANNU		PRODUCTION		ENHANC. COMBINED		CONT. OF		ENHANCED		ENHANCED		NO LIVESTOCK		NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-08/15	533	399	625	450	844	607	533	650	533	533	625	997	364	364	84	84	533	533
03/01-06/20																		
10/16-11/30																		
04/01-03/31		8																
04/01-03/31		14																
03/01-02/27	478	40	588	33	866	50	478	583	478	478	588	1009	366	427			478	478
06/03-10/05																		
04/01-03/31		5																
04/01-03/31		14																
05/15-10/28	505	221	932	444	1262	600	505	616	505	505	932	1718	368	368			505	505
10/29-12/15																		
04/01-03/31		9																
04/01-03/31		26																
06/15-10/14	91	124	150	218	209	298	91	111	91	91	150	290	79	79			91	91
04/01-03/31		2																
04/01-03/31		5																
03/01-02/28	719		718		1140		719	877	719	719	719	916	479	576			719	719
04/01-03/31		8																
04/01-03/31		22																
	61164	27081	76981	30860	109043	44696	61164	75945	61164	61164	77099	130130	41404	46172			61164	61164

PHILLIPS RESOURCE AREA PROPOSED ANP'S IN ALTERNATIVE B

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
			0	0	0	0	0	0	0	0	0	0	0	0		
5012	Big Coulee	P	17177.0	3924.1	0	0	15329.8	1763.2	1847.2	160.9	0	0	0	0	37	CA
															57	CA
															190	CA
															429	CA
															110	CA
															13	AN
															40	DM
															1	DM
5023	Frenchman Creek	P	21030.4	6070.6	0	0	11331.5	5137.7	5160.9	571.6	0	0	4538.0	371.3	30	H
															300	CA
															278	CA
															158	CA
															200	CA
															13	AN
															118	DM
															274	DM
5026	Wodkey Coulee	P	10400.1	1447.0	0	0	5359.2	1103.8	3334.2	97.8	0	0	1706.7	245.4	200	CA
															294	CA
															7	AN
															58	DM
															146	DM
5062	Austin Lake	P	9523.0	2350.2	0	0	7424.0	2252.5	2077.6	97.7	0	0	21.4	0	39	CA
															250	CA
															360	CA
															286	CA
															338	CA
															7	AN
															3	DM
															22	DM
5094	Upper Cottonwood	P	13770.3	6015.0	0	0	8736.5	4159.6	4536.8	1669.0	0	0	497.0	186.4	5	CA
															102	CA
															230	CA
															428	CA
															231	CA
															10	H
															11	AN
															5	AN
															87	DM
															56	DM
5095	Joiner Coulee	P	5079.3	1319.8	0	0	2449.9	335.4	2422.8	955.3	0	0	206.6	29.1	150	CA
															180	CA
															4	AN
															12	DM
															19	DM
5300	South Big Bend	P	3533.1	0	0	0	3158.3	0	284.7	0	0	0	90.1	0	151	CA
															157	CA
															151	CA
															3	AN
															25	AN
															8	DM
															6	DM
5372	Alkali Coulee	P	6658.4	867.8	0	0	2844.2	71.6	3755.3	792.5	0	0	58.9	3.7	46	CA
															36	CA
															100	CA
															200	CA
															8	AN
															15	DM
5384	North Wild Horse	P	1277.0	2557.5	0	0	39.7	0	1045.8	2278.4	154.8	259.0	36.7	20.1	6	CA
															107	CA
															1	AN
															3	DM
5390	Upper Overflow Coulee	P	2621.1	2085.8	0	0	160.7	0	2454.0	2085.8	0	0	6.4	0	180	CA
															3	AN
															6	DM
5406	Lower Albert Coulee	P	4330.7	3687.3	0	0	1534.4	2336.9	2716.1	1297.3	0	0	80.2	53.1	405	CA
															5	HO
															5	AN
															10	DM
5416	North Cabbage Coulee	P	12447.6	7863.4	0	0	7656.2	4239.9	4121.1	3602.7	0	0	670.3	20.8	47	CA
															770	CA
															148	CA
															16	AN
															29	DM
5424	Little Warm-Spring Creek	P	11819.3	5918.4	0	0	7787.0	3179.1	3691.5	2629.9	166.6	88.0	164.2	21.4	66	CA
															199	CA
															238	CA
															250	CA
															143	CA
															15	AN
															28	DM
Sub Total			119666	44117	0	0	73820	26580	37448	16239	321	347	8077	951		

SEASON OF USE	CURRENT AUMs		REC. STOCKING		POTEN. FORAGE PRODUCTION		ALTERNATIVE A EVASIAN CONFINED		ALTERNATIVE B CONFT. OP		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	3414	370	4242	1044	6312	1422	3414	4163	3414	4163	4342	7907	2464	2480	0	0	3414	3414
06/28-08/31																		
03/01-10/31																		
05/01-08/18																		
06/01-10/15																		
04/01-03/31	20																	
04/01-11/30	64																	
12/01-03/31	1																	
03/01-02/28	1878	2437	3075	1580	4602	2161	1878	2302	1878	2302	3075	4047	1231	1589	0	0	1878	1878
03/01-04/30																		
06/16-02/28																		
05/01-08/30																		
05/01-06/15																		
04/01-03/31	20																	
04/01-11/30	189																	
12/01-03/31	219																	
04/15-08/31	1330	182	1643	306	2560	414	1320	1911	1320	1911	1643	2694	874	1264	0	0	1320	1320
09/01-10/31																		
04/01-03/31	11																	
04/01-11/30	93																	
12/01-03/31	117																	
03/01-02/28	1851	644	2435	650	3498	882	1851	2258	1851	2258	2435	4655	1270	1317	0	0	1851	1851
05/05-03/08																		
05/09-03/31																		
06/01-06/30																		
07/01-11/08																		
04/01-03/31	11																	
12/01-03/31	2																	
04/01-11/30	35																	
03/01-02/28	2436	859	2720	1221	4151	1821	2436	3192	2436	3192	2720	3838	1588	2087	0	0	2436	2436
05/01-09/30																		
04/16-05/15																		
05/16-09/30																		
10/01/11/30																		
05/01-11/16																		
04/01-11/30	12																	
12/01-03/31	3																	
04/01-11/30	139																	
12/01-03/31	45																	
04/12-05/11	849	234	943	234	1541	422	849	1036	849	1036	943	1588	504	790	0	0	849	849
05/12-10/16																		
04/01-03/31	6																	
04/01-11/30	19																	
12/01-03/31	15																	
05/16-06/19	845		871		1202		845	1031	845	1031	871	1157	689	721	0	0	845	845
06/20-09/19																		
09/20-10/31																		
04/01-11/30	3																	
12/01-03/31	13																	
04/01-11/31	13																	
12/01-03/31	5																	
03/01-02/28	1240	346	1377	165	2285	318	1240	1513	1240	1513	1377	2838	1112	1151	0	0	1240	1240
05/01-05/30																		
06/01-11/30																		
05/01-06/01																		
04/01-03/31	13																	
04/01-03/31	36																	
03/01-02/28	151	425	176	370	363	774	151	184	151	184	176	348	102	204	0	0	151	151
05/15-09/30																		
04/01-03/31	2																	
04/01-03/31	7																	
05/01-09/30	478	421	431	328	830	657	478	583	478	583	431	550	287	566	0	0	478	478
04/01-03/31	5																	
04/01-03/31	12																	
05/01-10/31	1121	1338	878	850	1497	1292	1121	1505	1121	1505	878	1793	746	1001	0	0	1121	1121
05/15-09/30																		
04/01-03/31	8																	
04/01-03/31	24																	
03/01-02/28	1810	1297	2433	1559	3679	2474	1810	2208	1810	2208	2433	3796	636	942	0	0	1810	1810
05/01-07/24																		
05/01-07/12																		
04/01-03/31	25																	
04/01-03/31	70																	
03/01-02/28	2066	1076	2537	1307	3842	2074	2066	2520	2066	2520	2537	4718	1760	1942	0	0	2066	2066
06/10-08/08																		
07/01-08/25																		
08/26-12/15																		
08/09-12/15																		
04/01-03/31	24																	
04/01-03/31	67																	
Sub Total	19459	9829	24061	9614	36362	14711	19459	24406	19459	24406	24061	39929	13263	16054	0	0	19459	19459

PHILLIPS RESOURCE AREA EXISTING ANP

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCULCANT		GOOD		BASIC CONDITION		POOR		UNUSABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	TYPE
5001	Border	E	1847.6	0	0	0	985.8	0	861.8	0	0	0	0	0	27	CA
															1	AN
															4	DM
5002	North Woody Island	E	7384.0	640.0	0	0	7384.0	640.0	0	0	0	0	0	0	1	CA
															307	CA
															6	AN
															17	DM
5008	Sunny Slope	E	3165.9	3415.1	0	0	3165.9	3415.1	0	0	0	0	0	0	12	CA
															162	CA
															30	CA
															3	AN
															8	DM
5017	International	E	4250.2	0	0	0	2570.6	0	1679.6	0	0	0	0	0	167	CA
															3	AN
															10	DM
5030	Dunham Coulee	E	2797.1	80.0	0	0	2527.9	48.0	245.8	32.0	0	0	23.4	0	4	CA
															110	CA
															2	AN
															80	AN
															15	DM
															41	DM
5032	Johns Coulee	E	399.8	0	0	0	399.8	0	0	0	0	0	0	0	25	CA
															1	AN
															1	DM
5034	Plainsview	E	4845.8	0	0	0	3838.0	0	1007.8	0	0	0	0	0	2	CA
															204	CA
															3	AN
															37	DM
5036	Whitewater Lake	E	7588.5	1631.1	0	0	7463.1	1621.1	125.4	10.0	0	0	0	0	367	CA
															4	AN
															17	DM
5037	Lonetres Coulee	E	7092.1	1403.8	0	0	6838.1	1399.8	253.6	4.0	0	0	.4	0	314	CA
															6	AN
															19	DM
															15	DM
5038	Reservoir	E	1083.0	170.7	0	0	600.3	43.8	482.7	126.9	0	0	0	0	48	CA
															1	AN
															2	DM
5051	Woody Island	E	12114.9	6788.2	0	0	9798.2	5587.8	1763.0	1029.4	0	0	553.7	171.0	22	CA
															427	CA
															9	AN
															54	AN
															28	DM
															32	DM
5065	Eastfork Whitewater	E	6113.0	3386.2	0	0	5698.9	3193.4	412.5	188.0	0	0	1.6	4.8	15	CA
															132	CA
															67	CA
															4	AN
															15	DM
5084	Upper Coop Coulee	E	1900.7	959.2	0	0	590.4	467.6	1310.3	491.6	0	0	0	0	98	CA
															1	AN
															11	DM
															7	DM
5085	Coop Coulee	E	799.5	79.9	0	0	799.5	79.9	0	0	0	0	0	0	85	CA
															1	AN
															2	DM
5087	Joebell Coulee	E	6915.9	5760.8	0	0	6442.5	4257.8	473.4	1503.0	0	0	0	0	37	CA
															423	CA
															4	AN
															16	DM
5089	Martina Coulee	E	14214.1	11577.4	0	0	11003.9	8021.4	3037.2	3445.8	0	0	173.0	110.2	814	CA
															12	AN
															58	AN
															35	DM
5093	Lambing Coulee	E	9942.6	3669.3	0	0	5388.7	2739.9	4544.5	929.4	0	0	9.4	0	452	CA
															452	CA
															8	AN
															23	DM
															5	DM
5096	Lanere Coulee	E	14999.6	1221.3	0	0	9143.5	888.6	4675.2	291.8	0	0	1180.9	40.9	295	CA
															12	AN
															69	AN
															35	DM
															67	DM
5109	West Garland Creek	E	5029.5	3704.7	0	244.0	4219.8	2082.8	464.9	921.6	230.7	415.8	114.1	40.5	366	CA
															3	AN
															17	AN
															10	DM
															17	DM
5110	East Garland Creek	E	6086.7	6593.8	0	0	5570.9	6049.0	172.0	144.9	47.6	22.4	296.2	287.5	353	CA
															5	AN
															20	AN
															14	DM
															21	DM

SEASON OF USE	CURRENT BLM	NIMS OTHER	REC-STOCKING RATE/RUMS		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANCING COMBINED VEG. USES		ALTERNATIVE B CONV. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED INST. FORAGE		ALTERNATIVE D ENHANCED WATER/LOTLIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
			BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-10/31	5	8	460	0	723	0	525	879	525	879	525	1064	174	408	0	0	525	525
04/01-03/31	2																	
04/01-03/31	10																	
03/01-02/28	1553	147	2158	191	2880	254	1553	1895	1553	1895	2158	4161	903	903	0	0	1553	1553
04/01-10/15																		
04/01-03/31	9																	
04/01-03/31	41																	
03/01-02/28	755	684	941	1014	1255	1353	755	921	755	921	941	1828	515	515	0	0	755	755
04/16-11/15																		
05/01-10/31																		
04/01-10/31	5																	
04/01-03/31	19																	
05/01-10/31	999	0	1067	0	1644	0	999	1219	999	1219	1067	2334	615	641	0	0	999	999
04/01-03/31	5																	
04/01-10/31	24																	
03/01-02/28	910	20	781	0	1073	35	910	1110	910	1110	781	825	587	590	0	0	910	910
04/01-11/30																		
04/01-11/30	2																	
12/01-03/31	42																	
04/01-11/30	24																	
12/01-03/31	33																	
05/01-08/31	98	0	118	0	158	0	98	120	98	120	118	235	73	73	0	0	98	98
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	1095	52	1319	0	1889	0	1095	1336	1095	1336	1319	2700	703	704	0	0	1095	1095
05/01-10/15																		
04/01-03/31	5																	
04/01-03/31	89																	
06/01-10/30	1467	366	2158	466	2899	624	1467	1790	1467	1790	2158	4106	1170	1179	0	0	1467	1467
04/01-03/31	6																	
04/01-03/31	41																	
05/01-10/30	1531	352	1949	380	2646	510	1531	1868	1531	1868	1949	1578	912	916	0	0	1531	1531
04/01-03/31	9																	
04/01-11/30	30																	
12/01-03/31	12																	
05/01-10/01	214	28	263	36	415	65	214	305	214	305	263	565	141	201	0	0	214	214
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	1868	1169	2804	1588	3951	2240	1868	2279	1868	2279	2804	4469	987	1038	0	0	1868	1868
04/01-10/15																		
04/01-11/30	9																	
12/01-03/31	28																	
04/01-11/30	45																	
12/01-03/31	46																	
03/01-02/28	1212	364	1596	850	2185	1163	1212	1479	1212	1479	1596	3327	861	861	0	0	1212	1212
04/01-10/15																		
04/01-10/15	6																	
04/01-03/31	36																	
04/01-03/31	36																	
05/15-10/15	329	162	409	195	715	317	329	401	329	401	409	573	228	231	0	0	329	329
04/01-03/31	2																	
04/01-11/30	18																	
12/01-03/31	7																	
04/01-05/31	160	10	222	19	296	26	160	195	160	195	221	424	0	0	0	0	160	160
04/01-03/31	2																	
04/01-03/31	5																	
04/15-10/15	1588	1161	1897	1476	2598	2150	1588	1937	1588	1937	1897	3508	1097	1824	0	0	1588	1588
05/01-10/31																		
04/01-03/31	6																	
04/01-03/31	38																	
05/01-10/31	2945	1936	3440	2674	4979	3999	2945	3593	2945	3593	3440	6007	1968	2020	0	0	2945	2945
04/01-11/30	13																	
12/01-03/31	30																	
04/01-03/31	84																	
05/15-10/10	2054	687	2043	845	3256	1246	2054	2637	2054	2637	2054	4108	1545	1935	0	0	2054	2054
11/05-12/10																		
04/01-03/31	13																	
04/01-11/30	37																	
12/01-03/31	4																	
04/15-11/30	2021	205	2800	255	4272	377	2021	2466	2021	2466	2800	3920	1221	1459	0	0	2021	2021
04/01-11/30	13																	
12/01-03/31	36																	
04/01-11/30	56																	
12/01-03/31	54																	
05/01-10/31	939	1259	1194	885	1720	1383	939	1146	939	1146	1194	1967	618	662	0	0	939	939
04/01-11/30	3																	
12/01-03/31	9																	
04/01-11/30	16																	
12/01-03/31	14																	
05/01-10/31	1014	1100	1414	1965	1926	2117	1014	1270	1014	1270	1414	2170	676	728	0	0	1014	1014
04/01-11/30	5																	
12/01-03/31	11																	
04/01-11/30	22																	
12/01-03/31	17																	

PHILLIPS RESOURCE AREA EXISTING ANPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRATING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	DO	CBS
5111	Little Cottonwood Creek	E	4915.4	9528.3	0	0	3475.3	4229.8	1140.7	4764.8	0	0	299.4	533.7	463	4
5115	Rig Bend	E	1460.3	2236.6	0	0	1009.5	1263.0	367.2	786.9	0	0	83.6	186.7	1	CA
															291	AN
															1	AN
															11	AN
															9	DM
5329	Cow Creek	E	963.0	250.9	0	0	641.0	74.0	322.0	176.9	0	0	0	0	100	CA
															36	CA
															1	AN
															2	DM
5339	Crooke Coulee	E	3138.8	2160.1	52.9	124.0	2712.8	1754.5	173.8	40.9	0	0	199.3	240.7	130	CA
															4	AN
															4	DM
															7	DM
5344	Fourth Creek	E	4638.6	275.1	523.4	34.9	3987.0	233.5	0	0	0	0	128.2	6.7	7	CA
															185	CA
															6	AN
															5	DM
															11	DM
5345	Second Creek	E	1945.7	1822.9	0	0	1565.1	1386.8	213.8	312.2	0	0	166.8	123.9	139	CA
															2	AN
															1	DM
															5	DM
5348	Coon Coulee	E	159.6	0	42.2	0	108.1	0	0	0	0	0	9.3	0	5	CA
															1	AN
															1	DM
5363	Black Coulee	E	1541.8	469.4	0	0	1541.8	469.4	0	0	0	0	0	0	89	CA
															2	AN
															4	DM
5368	Beavers	E	879.6	324.0	0	0	740.7	324.0	138.9	0	0	0	0	0	57	CA
															1	AN
															2	DM
5374	Halfway Coulee	E	2200.1	160.0	0	0	1332.3	160.0	867.8	0	0	0	0	0	2	CA
															77	CA
															3	AN
															5	DM
5387	West Alkali Creek	E	9613.7	10338.5	0	0	5400.4	3830.1	3980.3	6455.7	0	0	233.0	52.7	720	CA
															12	AN
															23	AN
5388	Rudolph Coulee	E	7021.4	1903.5	320.0	640.0	4573.1	1046.6	2121.3	216.9	0	0	7.0	0	34	CA
															130	CA
															251	CA
															261	CA
															9	AN
															16	DM
5407	Albert Coulee	E	3103.0	1175.6	0	0	2320.8	1072.9	673.8	52.9	0	0	108.4	49.8	9	CA
															184	CA
															4	AN
															7	DM
5408	Trueblood Coulee	E	12990.5	3648.3	0	0	9982.4	2872.6	2956.3	768.5	0	0	51.8	7.2	45	CA
															505	CA
															16	AN
															31	DM
5415	Overflow Coulee	E	8446.0	9250.3	0	0	3965.4	3421.7	3844.0	5512.0	580.6	8.9	56.0	307.7	27	CA
															436	CA
															11	AN
															20	DM
5417	Whiterock Coulee	E	17915.8	6165.3	0	0	10840.8	2870.8	5510.1	1869.6	3.0	221.0	1561.9	204.0	16	CA
															437	CA
															22	AN
															42	DM
5427	North Flat Creek	E	16431.0	7310.6	0	0	10313.2	3519.9	5200.9	3638.1	0	0	916.9	152.6	8	CA
															497	CA
															21	AN
															40	DM
5428	Rhumatian Coulee	E	3779.6	316.0	0	0	466.8	0	2576.4	316.0	627.6	0	108.8	0	145	CA
															7	AN
															13	DM
5429	Spring Creek	E	13875.1	4395.5	0	0	7675.5	2391.8	6217.6	1879.4	0	0	82.0	24.3	37	CA
															173	CA
															370	CA
															17	AN
															33	DM
5432	Upper Black Coulee	E	5557.2	40.0	0	0	3769.1	6.4	1141.6	32.0	0	0	647.5	1.6	111	CA
															5	AN
															9	DM

SEASON OR USE	CURRENT ALMS		REC. STOCKING RATE/ALMS		POTEN. PORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED VEG. USES		ALTERNATIVE B CONV. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. PORAGE		ALTERNATIVE D ENHANCED WATER/WILDLIFE		ALTERNATIVE E NO LIVESTOCK CHASING		ALTERNATIVE F NO ACTION	
	ST	LI	BLM	OTHER	BLM	OTHER	ST	LI	ST	LI	ST	LI	ST	LI	ST	LI	ST	LI
	860	1923	1019	1891	1506	3147	860	1280	860	1280	1019	1627	287	359	0	0	860	860
03/01-10/31																		
04/01-11/30	4																	
12/01-03/31	25																	
04/01-11/30	19																	
12/01-03/31	7																	
03/01-02/28	227	283	286	409	425	639	227	277	227	277	286	429	9	9	0	0	227	227
04/01-03/31																		
04/01-11/30	1																	
12/01-03/31	6																	
04/01-03/31	7																	
04/15-07/15	376	150	246	52	364	90	376	459	376	459	246	518	198	217	0	0	376	376
04/01-03/31	2																	
04/01-03/31	5																	
05/01-10/31	458	323	619	421	844	558	458	559	458	559	619	751	305	343	0	0	458	458
04/01-03/31	6																	
12/01-03/31	3																	
04/01-11/30	11																	
03/01-02/28	904	202	1189	75	1538	96	904	2009	904	2009	1189	1575	654	663	0	0	904	904
03/16-10/31																		
04/01-03/31	9																	
12/01-03/31	4																	
04/01-11/30	18																	
03/16-11/15	416	417	378	392	531	567	416	507	416	507	416	522	312	340	0	0	416	416
04/01-03/31	3																	
12/01-03/31	1																	
04/01-11/30	8																	
05/01-11/30	34	0	39	0	48	0	34	42	34	42	39	49	29	29	0	0	34	34
04/01-03/31	2																	
04/01-03/31	2																	
04/16-10/15	439	97	427	126	572	170	439	536	439	536	439	792	257	267	0	0	439	439
04/01-03/31	3																	
04/01-03/31	10																	
05/01-10/31	255	75	241	92	340	123	255	311	255	311	255	465	167	167	0	0	255	255
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	532	25	505	37	776	50	532	649	532	649	532	1094	342	414	0	0	532	532
04/15-11/14																		
04/01-03/31	5																	
04/01-03/31	12																	
05/01-10/15	1841	2099	1933	1889	2995	3180	1841	2276	1841	2276	1933	3482	1150	1437	0	0	1841	1841
04/01-03/31	19																	
04/01-03/31	55																	
03/01-02/28	1827	393	1592	490	2354	616	1827	2229	1827	2229	1827	2326	1348	1460	0	0	1827	1827
07/16-10/19																		
03/01-07/15																		
07/16-10/31																		
04/01-03/31	14																	
04/01-03/31	38																	
03/01-02/28	860	350	757	297	1091	404	860	1049	860	1049	860	1567	576	608	0	0	860	860
03/01-10/31																		
04/01-03/31	6																	
04/01-03/31	17																	
03/01-02/28	2968	849	3043	854	4413	1242	2968	3069	2968	3069	3043	6148	1840	1895	0	0	2968	2968
04/15-10/31																		
04/01-03/31	25																	
04/01-03/31	74																	
03/16-02/28	1306	1630	1601	1679	2728	2842	1306	1593	1306	1593	1601	2709	868	1122	0	0	1306	1306
03/01-10/31																		
04/01-03/31	17																	
04/01-03/31	48																	
03/01-02/28	2133	681	3147	1143	4744	1753	2133	2602	2133	2602	3147	5739	1445	2047	0	0	2133	2133
03/01-10/31																		
04/01-03/31	35																	
04/01-03/31	101																	
03/01-02/28	2451	1122	3106	1346	4706	2186	2451	3062	2451	3062	3106	6784	1734	2157	0	0	2451	2451
03/01-11/30																		
04/01-03/31	33																	
04/01-03/31	98																	
05/01-11/30	511	507	542	52	1085	104	511	893	511	893	542	1040	363	615	0	0	511	511
04/01-03/31	11																	
04/01-03/31	31																	
02/01-02/28	2503	1019	2909	913	4548	1430	2503	3308	2503	3308	2909	6051	999	1330	0	0	2503	2503
03/01-10/30																		
05/16-10/30																		
04/01-03/31	27																	
04/01-03/31	79																	
05/01-11/30	751	30	1014	7	1483	13	751	993	751	993	1014	1203	538	675	0	0	751	751
04/01-03/31	8																	
04/01-03/31	22																	

PHILLIPS RESOURCE AREA EXISTING AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSATISFACTORY		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5437	Sage Creek	E	3125.1	1921.6	0	0	2036.6	1368.6	691.1	476.3	134.6	14.0	262.8	62.7	102	CA 4 AR 7 DM
5439	Flat Creek	E	13041.7	2883.1	0	0	6534.8	737.3	5423.3	2083.8	124.9	10.8	958.7	51.2	2	CA 224 16 AR 31 DM
5440	West Flat Creek	E	8950.8	381.9	1192.3	3.2	5768.5	316.9	1063.6	0	0	0	926.4	61.8	1	CA 122 11 AR 21 DM
5441	Lower Alkali Coulée	E	959.6	320.0	0	0	959.6	320.0	0	0	0	0	0	0	60	CA 1 AR 2 DM
5443	First Creek Hall	E	4094.7	1232.8	0	0	3406.9	985.9	685.3	246.9	0	0	2.5	0	10	CA 150 5 AR 10 DM
5445	Upper First Creek	E	4186.8	2563.4	0	0	4186.8	2472.4	0	91.0	0	0	0	0	6	CA 207 5 AR 10 DM
5454	Dog Creek	E	2024.6	496.9	0	0	239.7	0	1692.0	496.9	82.0	0	10.9	0	7	CA 153 3 AR 5 DM
Sub Total Existing AMPs			275630	122562	2131	1046	193983	78665	68511	39436	1831	593	9174	2722		

SEASON OF USE	CURRENT AUMs		REC. STOCKING		FOEN. FORAGE		ALTERNATIVE A ENHANC. CONTINUED		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK		ALTERNATIVE F NO ACTION	
			RATE/AUMs		PRODUCTION		VEG. USE/S				LVST. FORAGE		WATER/MLD/LP		GRAZING			
	BLN	OTHER	BLN	OTHER	BLN	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	323	239	323	382	794	557	329	401	329	401	526	603	221	236	0	0	329	329
03/01-10/31																		
04/01-03/31	6																	
04/01-03/31	17																	
03/01-02/28	1243	248	2196	458	3674	807	1243	1661	1243	1661	2196	3191	861	1137	0	0	1243	1243
03/01-11/15																		
04/01-03/31	23																	
04/01-03/31	74																	
03/01-02/28	709	30	1711	70	2290	93	709	865	709	865	1711	2336	472	519	0	0	709	709
03/01-10/31																		
04/01-03/31	17																	
04/01-03/31	50																	
03/01-10/31	179	183	227	75	307	101	179	218	179	218	265	442	121	121	0	0	179	179
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	842	265	936	272	1332	393	842	1027	842	1027	936	1895	584	589	0	0	842	842
03/01-11/18																		
04/01-03/31	8																	
04/01-03/31	24																	
03/01-02/27	723	593	1101	658	1478	896	723	882	723	882	1101	2150	484	484	0	0	723	723
03/01-10/31																		
04/01-03/31	8																	
04/01-03/31	24																	
03/01-02/28	306	80	333	83	642	167	306	567	306	567	333	677	43	215	0	0	306	306
03/01-10/31																		
04/01-06/14	5																	
04/01-03/31	12																	
Sub Totals	49260	23577	60656	26883	88888	37897	49260	62170	49260	62170	61960	104372	31219	36663	0	0	49260	49260

PHILLIPS RESOURCE AREA NON-AMPS

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION			POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	FAIR	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5016	Leibel Coulee	N	298.0	0	0	0	298.0	0	0	0	0	0	0	0	0	5 2 2 1 1	CA AN DM DM DM
5025	Middle Frenchman	N	1186.6	2846.3	0	0	785.8	1708.7	117.6	720.5	0	0	283.2	417.3	190	1 6 16	CA AN DM DM DM
5046	N. Cowie Coulee	N	501.4	0	0	0	501.4	0	0	0	0	0	0	0	0	9 1 1	CA AN DM
5048	County Line	N	40.0	205.5	0	0	14.0	8.9	26.0	196.4	0	0	0	2.2	1	1 1	CA AN DM
5050	Kegal Coulee	N	241.5	625.7	0	0	145.5	318.6	73.9	280.3	0	0	22.1	26.8	3	1 2 1 1	CA AN AN DM DM
5054	Bloyn Coulee	N	319.9	338.0	0	0	319.9	358.0	0	0	0	0	0	0	0	6 1 1	CA AN DM
5055	Martin Lake Coulee	N	262.9	0	0	0	210.9	0	48.9	0	0	0	0	3.1	0	4 1 1	CA AN DM
5057	Dry Sag Coulee	N	39.8	0	0	0	39.8	0	0	0	0	0	0	0	0	1 1 1	CA AN DM
5060	South Dibble Coulee	N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	0	1 1 1	CA AN DM
5061	Upper Sink Coulee	N	479.2	0	0	0	410.3	0	68.9	0	0	0	0	0	0	8 1 1	CA AN DM
5077	Ash Coulee	N	156.3	0	0	0	111.0	0	36.7	0	0	0	0	8.8	0	2 1 2	CA AN AN
5081	Forty	N	40.0	0	0	0	0	0	40.0	0	0	0	0	0	0	1 1 1	CA AN DM
5082	Bench	N	80.0	0	0	0	80.0	0	0	0	0	0	0	0	0	2 1 1	CA AN DM
5102	Upper N. Fork Mud	N	120.0	0	0	0	40.0	80.0	0	0	0	0	0	0	0	2 1 1	CA AN DM
5103	S. Joiner Coulee	N	878.6	1118.7	0	0	545.6	623.6	325.1	489.6	0	0	7.9	5.5	2	1 92	CA AN DM
5105	Upper Pierson Coulee	N	80.0	0	0	0	0	0	80.0	0	0	0	0	0	0	2 1 1	CA AN DM
5114	Milk River	N	1145.7	0	0	0	995.2	0	82.0	0	0	0	0	68.5	0	3 18 1	CA AN AN DM DM
5118	Lower Stinky Creek	N	439.8	0	0	0	183.9	0	244.4	0	0	0	0	11.5	0	7 1 2 5	CA AN DM DM
5119	E. Stinky Creek	N	120.6	0	0	0	96.2	0	17.8	0	0	0	0	6.6	0	2 1 1	CA AN DM
5120	W. Stinky Creek	N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	0	1 1 1 1	CA AN DM DM
5121	Little Coulee	N	79.8	0	0	0	79.8	0	0	0	0	0	0	0	0	1 1 1	CA AN DM

SEASON OF USE	CURRENT AUMs		REC. STOCKING RATE/AUM	POTN. FORAGE PRODUCTION	ENHANC. COMBINED VED. USES	ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
	BLM	OTHER				ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	58		85	113		58	58	58	58	85	85	58	58			58	58
04/01-03/31	3																
04/01-03/31	2																
06/01-10/31	128	443	176	518	246	762	128	128	128	128	176	176	128	128		128	128
04/01-03/31	2																
04/01-11/30	10																
12/01-03/31	13																
03/01-02/28	112		173	231		112	112	112	112	173	173	112	112			112	112
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	9		8	38	15	74	9	9	9	9	8	8	9	9		9	9
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	37		49	122	75	199	37	37	37	37	49	49	37	37		37	37
04/01-11/30	1																
12/01-03/31	1																
04/01-11/30	2																
12/01-03/31	1																
03/01-02/28	73		83	90	111	121	73	73	73	73	83	83	73	73		73	73
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	50		63	90		90	50	50	50	50	63	63	50	50		50	50
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	12		11	14		12	12	12	12	12	11	11	12	12		12	12
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	9		12	16		9	9	9	9	12	12	9	9			9	9
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	90		115	160		90	90	90	90	115	115	90	90			90	90
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	27		32	48		27	27	27	27	32	32	27	27			27	27
04/01-11/30	1																
12/01-03/31	1																
04/01-11/30	2																
12/01-03/31	1																
03/01-02/28	10		8	15		10	10	10	10	8	8	10	10			10	10
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	15		21	28		15	15	15	15	21	21	15	15			15	15
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	27		26	44		27	27	27	27	26	26	27	27			27	27
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	190	382	230	255	343	392	190	190	190	190	230	230	190	190		190	190
05/10-10/31																	
04/01-03/31	2																
04/01-03/31	5																
03/01-02/28	18		15	30		18	18	18	18	15	15	18	18			18	18
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	31		250	346		31	31	31	31	250	250	31	31			31	31
04/01-11/30	1																
12/01-03/31	9																
04/01-11/30	2																
12/01-03/31	2																
03/01-02/28	80		90	153		80	80	80	80	90	90	80	80			80	80
04/01-03/31	2																
04/01-11/30	3																
12/01-03/31	4																
03/01-02/28	19		23	33		19	19	19	19	23	23	19	19			19	19
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	6		10	16		6	6	6	6	10	10	6	6			6	6
04/01-03/31	2																
04/01-03/31	2																
12/01-03/31	1																
03/01-02/28	17		25	34		17	17	17	17	25	25	17	17			17	17
04/01-03/31	2																
04/01-03/31	2																

PHILLIPS RESOURCE AREA NON-AMF# CONTINUED

ALLOT. NO.	ALLOTMENT NAME	PGT FIS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNUSABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5133	Brush Coulee	N	339.6	0	0	0	330.8	0	28.0	0	0	0	.8	0	4	CA
															1	AN
															2	DC
															1	DC
5124	Burnt Shed Coulee	N	200.0	0	0	0	36.0	0	160.0	0	0	0	4.0	0	4	CA
															1	AN
															1	DC
															1	DC
5123	McChesney Res.	N	80.0	0	0	0	80.0	0	0	0	0	0	0	0	1	CA
															1	AN
															1	DC
5126	Leske Coulee	N	112.3	0	0	0	87.6	0	24.9	0	0	0	0	0	2	CA
															1	AN
															1	DC
5128	E. Lower Stinky	N	50.0	0	0	0	18.0	0	32.0	0	0	0	0	0	1	CA
															1	AN
															1	DC
5137	Goertz Coulee	N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	1	CA
															1	AN
															1	DC
5138	E. Sheep Coulee	N	79.8	0	0	0	76.9	0	2.9	0	0	0	0	0	2	CA
															1	AN
															2	DC
5139	Sheep Coulee	N	599.3	0	0	0	497.3	0	101.8	0	0	0	0	0	12	CA
															1	AN
															2	DC
5140	Williams Coulee	N	199.3	0	0	0	119.3	0	80.0	0	0	0	0	0	3	CA
															1	AN
															1	DC
5142	E. Dodson Creek	N	333.5	0	0	0	333.5	0	0	0	0	0	0	0	6	CA
															1	AN
															1	DC
5145	E. Eureka Creek	N	280.0	0	0	0	169.4	0	100.0	0	0	0	0	0	5	CA
															1	AN
															1	DC
5146	Vaughn Coulee	N	359.6	0	0	0	359.6	0	0	0	0	0	0	0	4	CA
															1	AN
															1	DC
5147	Lower Vaughn Coulee	N	79.9	0	0	0	79.9	0	0	0	0	0	0	0	1	CA
															1	AN
															1	DC
5148	Upper Spring Creek	N	240.0	0	0	0	0	0	240.0	0	0	0	0	0	4	CA
															1	AN
															1	DC
5149	Spring Creek	N	1207.8	0	0	0	1042.8	0	142.8	0	0	0	22.2	0	16	CA
															1	AN
															3	DC
5151	Dry Coulee	N	120.0	0	0	0	120.0	0	0	0	0	0	0	0	3	CA
															1	AN
															1	DC
5156	Lower Assiniboine Creek	N	368.6	645.6	0	0	453.4	483.1	114.9	134.0	0	0	0.3	28.5	39	CA
															1	AN
															14	AN
															1	DC
															1	DC
5157	Lower Rattlennable Coulee	N	79.8	0	0	0	77.8	0	0	0	0	0	2.0	0	1	CA
															1	AN
															1	DC
															1	DC
5158	Upper Mount Coulee	N	319.5	0	0	0	163.7	0	149.7	0	0	0	6.1	0	6	CA
															1	AN
															1	DC
5303	Canty Coulee	N	1023.7	0	0	0	852.8	0	138.0	0	0	0	32.9	0	18	CA
															1	AN
															2	DC
5308	McNeil Slough	N	215.4	0	0	0	0	0	215.4	0	0	0	0	0	5	CA
															1	AN
															1	DC
5311	Nelson Reservoir	N	77.8	104.0	0	0	0	0	77.8	104.0	0	0	0	0	2	CA
															1	AN
															1	DC

SEASON OF USE	CURRENT AIMS		REC. STOCKING		POTEN. FORAGE		ALTERNATIVE A INHAUS. COMBINED		ALTERNATIVE B CONT. OF		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK		ALTERNATIVE F NO ACTION	
	BLM OTHER		RATE/AIMS		PRODUCTION		VEG. USES		PRESENT MGMT.		LIVST. FORAGE		WATER/ANIMAL LIFE		GRAZING		ST L7	
	ST	L7	BLM	OTHER	BLM	OTHER	ST	L7	ST	L7	ST	L7	ST	L7	ST	L7	ST	L7
03/01-02/28	53																	
04/01-03/31	2		88		120		53	53	53	53	88	88	53	53			53	53
04/01-11/30		5																
12/01-03/31		2																
03/01-02/28		45		29		53	45	45	45	45	29	29	45	45			45	45
04/01-03/31		2																
04/01-11/30		2																
12/01-03/31		1																
03/01-02/28		6		29		38	6	6	6	6	29	29	6	6			6	6
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		23		27		40	23	23	23	23	27	27	23	23			23	23
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		8		10		18	8	8	8	8	10	10	8	8			8	8
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		9		10		13	9	9	9	9	10	10	9	9			9	9
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		20		21		28	20	20	20	20	21	21	20	20			20	20
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		145		158		223	145	145	145	145	158	158	145	145			145	145
04/01-03/31		2																
04/01-03/31		5																
03/01-02/28		42		41		64	42	42	42	42	41	41	42	42			42	42
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		69		88		119	69	69	69	69	88	88	69	69			69	69
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		58		51		78	58	58	58	58	51	51	58	58			58	58
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		50		95		127	50	50	50	50	95	95	50	50			50	50
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		8		24		32	8	8	8	8	24	24	8	8			8	8
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		51		40		80	51	51	51	51	40	40	51	51			51	51
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		188		290		409	188	188	188	188	290	290	188	188			188	188
04/01-03/31		2																
04/01-03/31		7																
03/01-02/28		30		34		46	30	30	30	30	34	34	30	30			30	30
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		60	135	136	138	197	201	60	60	60	60	136	136	60	60		60	60
04/01-11/30		1																
12/01-03/31		7																
04/01-11/30		2																
12/01-03/31		1																
03/01-02/28		12		19		26	12	12	12	12	19	19	12	12			12	12
04/01-03/31		2																
04/01-11/30		2																
12/01-03/31		1																
03/01-02/28		69		67		106	69	69	69	69	67	67	69	69			69	69
04/01-03/31		2																
04/01-03/31		2																
03/01-02/28		207		245		345	207	207	207	207	245	245	207	207			207	207
04/01-03/31		2																
04/01-03/31		5																
03/01-01/24		54																
04/01-03/31		2		32		63	54	54	54	54	32	32	54	54			54	54
03/01-02/28		2																
04/01-03/31		22		15	20	30	40	22	22	22	22	15	15	22	22		22	22
04/01-03/31		2																
03/01-02/28		2																

PHILLIPS RESOURCE AREA NON-AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MCT STR	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5313	W. Saco Dump	N	95.7	0	0	0	31.2	0	37.4	0	0	0	7.1	0	2	CA
															1	AN
															1	DM
5314	N. First Creek	N	262.7	1006.1	0	0	160.0	339.2	84.9	628.0	0	0	17.8	38.9	3	CA
															1	AN
															1	DM
5317	N. Cactus Flat	N	165.8	0	0	0	0	165.8	0	0	0	0			1	CA
															2	AN
															1	DM
5318	Cactus Flat	N	155.8	0	0	0	0	155.8	0	0	0	0	0	0	1	CA
															1	AN
															1	DM
5326	Delaney Coulee	N	40.0	174.9	0	0	40.0	174.9	0	0	0	0	0	0	1	DM
															1	CA
															1	AN
5327	N. Rocky Point	N	102.0	0	0	0	102.0	0	0	0	0	0	0	0	1	DM
															2	CA
															1	AN
5330	Davison Coulee	N	400.7	0	0	0	154.9	0	245.8	0	0	0	0	0	1	DM
															8	CA
															2	AN
5333	S. Dodson Canal	N	40.0	0	0	0	0	0	28.0	0	12.0	0	0	0	3	DM
															1	CA
															1	AN
5335	Turnell Coulee	N	229.6	0	0	0	102.9	126.7	0	0	0	0	0	0	1	DM
															4	CA
															1	AN
5337	N. Clanton Coulee	N	830.8	0	0	0	830.8	0	0	0	0	0	0	0	1	DM
															15	CA
															1	AN
5340	N. Alkali Lake	N	159.7	0	0	0	159.1	0	0	0	0	0	0.6	0	1	DM
															1	CA
															1	AN
5342	Upper Crooks Coulee	N	547.1	0	0	0	498.7	0	0	0	0	0	48.4	0	1	DM
															11	CA
															1	AN
5346	N. Third Creek	N	399.6	0	0	0	362.0	0	0	0	0	0	37.6	0	3	DM
															1	DM
															6	CA
															1	AN
															2	DM
5347	West Coulee	N	100.0	0	0	0	90.0	0	0	0	0	0	10.0	0	1	CA
															1	AN
															1	DM
5358	N. Seven Mile	N	32.0	0	0	0	32.0	0	0	0	0	0	0	0	1	CA
															1	AN
															1	DM
5360	S. Lenoir Coulee	N	182.9	0	0	0	67.0	0	97.9	0	0	0	23.0	0	3	CA
															1	AN
															1	DM
5366	Middle Black Coulee	N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	1	CA
															1	AN
															1	DM
5365	Junction	N	319.5	159.8	0	0	159.9	159.8	159.6	0	0	0	0	0	7	CA
															1	AN
															1	DM
5367	E. Alkali	N	1319.0	0	0	0	1014.2	0	304.8	0	0	0	0	0	22	CA
															2	AN
															3	DM
5370	W. Bench	N	159.5	0	0	0	133.0	0	20.8	0	0	0	5.7	0	2	CA
															1	AN
															1	DM
5380	Upper Cow Creek	N	161.0	0	0	0	93.0	68.0	0	0	0	0	0	0	2	CA
															1	AN
															1	DM

SEASON OF USE	CURRENT SUM	AUMS OTHER	REC. STOCKING		FUTER. FORAGE		ALTERNATIVE A ENHANCED COMBINED VEG. USES		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVEL. FORAGE		ALTERNATIVE D ENHANCED WATER/SHED/IFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
			RATE/AUMS		PRODUCTION		ST		ST		ST		ST		ST		ST	
			NUM	OTHER	NUM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
04/01-03/31	21		16		25		21	21	21	21	16	16	21	21	21		21	21
04/01-03/31	2																	
03/01-02/28	2																	
04/01-03/31	37		45	167	68	285	37	37	37	37	45	45	37	37			37	37
04/01-03/31	2																	
03/01-02/28	2																	
04/01-03/31	14		20		40		14	14	14	14	20	20	14	14			14	14
04/01-03/31	3																	
03/01-02/28	2																	
04/01-03/31	16		19		38		16	16	16	16	19	19	16	16			16	16
04/01-11/30	2																	
04/01-11/31	2																	
12/01-03/31	9		11	50	15	67	9	9	9	9	11	11	9	9			9	9
03/01-02/28	2																	
04/01-03/31	2																	
04/01-03/31	24		26		35		24	24	24	24	26	26	24	24			24	24
03/01-02/28	2																	
04/01-03/31	2																	
04/01-03/31	93		85		150		93	93	93	93	85	85	93	93			93	93
03/01-02/28	3																	
04/01-03/31	7																	
04/01-03/31	8		7		15		8	8	8	8	7	7	8	8			8	8
03/01-02/28	2																	
04/01-03/31	2																	
04/01-03/31	46		50		82		46	46	46	46	50	50	46	46			46	46
03/01-02/28	2																	
04/01-03/31	2																	
04/01-03/31	92		210		283		92	92	92	92	210	210	92	92			92	92
03/01-02/28	2																	
04/01-03/31	2																	
04/01-03/31	16		39		52		16	16	16	16	39	39	16	16			16	16
03/01-02/28	2																	
04/01-03/31	2																	
04/01-03/31	133		117		158		133	133	133	133	117	117	133	133			133	133
03/01-02/28	2																	
04/01-03/31	2																	
12/01-03/31	66		79		105		66	66	66	66	79	79	66	66			66	66
04/01-11/30	2																	
03/01-02/28	2																	
12/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	17		19		26		17	17	17	17	19	19	17	17			17	17
04/01-03/31	2																	
12/01-03/31	2																	
04/01-11/30	2																	
03/01-02/28	7		9		12		7	7	7	7	9	9	7	7			7	7
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	34		36		58		34	34	34	34	36	36	34	34			34	34
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	7		11		15		7	7	7	7	11	11	7	7			7	7
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	78		76	41	121	55	78	78	78	78	76	76	78	78			78	78
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	267		337		487		267	267	267	267	337	337	267	267			267	267
04/01-03/31	3																	
04/01-03/31	7																	
03/01-02/28	29		39		54		29	29	29	29	39	39	29	29			29	29
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	19		39		60		19	19	19	19	39	39	19	19			19	19
04/01-03/31	2																	
04/01-03/31	2																	

PHILLIPS RESOURCE AREA NON AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5383	Upper W. Alkali	N	169.8	0	0	0	0	0	169.8	0	0	0	0	0	3	CA AN DM
5395	South DHS Creek	N	120.0	0	0	0	0	0	120.0	0	0	0	0	0	1	CA AN DM
5396	Upper DHS Creek	N	400.0	0	0	0	298.0	0	102.0	0	0	0	0	0	6	CA AN DM
5412	Shed Coulee	N	968.5	32.7	0	0	797.9	28.7	0	0	0	0	170.6	4.0	5	CA AN DM
5418	Wild Horse	N	1005.2	0	0	0	34.4	0	965.4	0	0	0	5.4	0	12	CA RD RD AN DM
5421	Cabbage Coulee	N	799.0	239.8	0	0	705.2	204.9	79.8	0	0	34.9	14.0	0	13	CA AN DM
5422	Spring Coulee	N	388.0	0	0	0	140.0	0	240.0	0	0	0	8.0	0	6	CA AN DM
5425	Upper Whiterock	N	1286.3	0	0	0	809.8	0	430.9	0	0	0	45.8	0	20	CA AN DM
SUB TOTAL NON-AMPs			24097	7517	0	0	16752	4406	6448	2353	12	35	885	523		

PHILLIPS RESOURCE AREA UNALLOCATED TRACTS

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
5366	Water Holding Post		479.3	0	0	0	479.3	0	0	0	0	0	0	0	1	AN DM
5462	First Creek Holding Post		480.0	0	0	0	480.0	0	0	0	0	0	0	0	1	AN DM
SUB TOTAL UNALLOCATED				960			960									
TOTAL PHILLIPS RA			742483	304777	3026	1299	544680	212410	165136	82318	2803	1199	26838	7551		

SEASON OF USE	CURRENT AUMs		REC. STOCKING RATE/AUMs		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED VEG. USES		ALTERNATIVE B CONV. OF PERENN. MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATER/WILDLIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	38		27		53		38	38	38	38	27	27	38	38			38	38
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	17		22		45		17	17	17	17	22	22	17	17			17	17
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	67		90		135		67	67	67	67	90	90	67	67			67	67
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	60		181	6	241	9	60	60	60	60	181	181	60	60			60	60
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	156		160		314		156	156	156	156	160	160	156	156			156	156
03/01-04/30																		
02/01-02/28																		
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	179		178	52	249	78	179	179	179	179	178	178	179	179			179	179
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	68		75		125		68	68	68	68	75	75	68	68			68	68
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	232		254		388		232	232	232	232	254	254	232	232			232	232
04/01-03/31	3																	
04/01-03/31	7																	
	4097	960	5331	1497	8863	2283	4097	4097	4097	4097	5331	5331	4097	4097			4097	4097

SEASON OF USE	CURRENT AUMs		REC. STOCKING RATE/AUMs		POTEN. FORAGE PRODUCTION		ALTERNATIVE A VEG. USES		ALTERNATIVE B CONV. OF PERENN. MGMT.		ALTERNATIVE C LIVST. FORAGE		ALTERNATIVE D ENHANCED WATER/WILDLIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-03/31	2		131		176		2	4	2	2	2	3	2	6	6	6	2	2
04/01-03/31	2						2	4	2	2	2	3	2	6	6	6	2	2
04/01-03/31	2		149		250		2	4	2	2	2	3	2	6	6	6	2	2
04/01-03/31	2						2	4	2	2	2	3	2	6	6	6	2	2
			280		426													
133984	61747	167309	68584	241061	99677	133784	166132	133784	151837	168451	279762	89983	102986				133784	133784

VALLEY RESOURCE AREA PROPOSED AMPs (Not proposed in Alternative B)

ALLOT. NO.	ALLOTMENT NAME	MGT S/S	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS		
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS	
4001	Crow Creek	P	2434.4	319.6	0	0	895.4	14.9	1388.6	304.7	0	0	150.4	0	101	2 AN 5 DM	
4006	Bluff Creek	P	1918.4	1589.8	0	0	995.9	1247.1	922.5	342.7	0	0	0	0	300	CA 300 CA 1 AN 1 DM	
4010	W. Fork Rock Creek	P	2698.3	1357.0	0	0	1624.6	932.5	1073.4	424.0	0	0	0.3	0.5	250	CA 250 CA 2 AN 5 DM	
4011	North Chambers Creek	P	141.1	1027.2	0	0	102.0	924.2	38.5	103.0	0	0	0.6	0	2	CA 1 AN 1 AN 1 AN 1 DM	
4012	Lower Tomato Creek	P	5252.2	1781.3	54.8	2.0	4073.2	1447.3	1080.6	288.2	0	0	43.6	43.0	75	CA 150 CA 210 CA 150 CA 2 AN 2 AN 1 AN 9 DM 7 DM 24 DM	
4013	N. Tomato Creek	P	1408.3	26.8	118.8	0	821.8	26.8	467.7	0	0	0	0	0	90	C 1 AN 3 DM	
4014	N. Fork Rock Creek	P	3842.5	2385.4	0	0	1841.5	1761.7	1975.6	606.2	0	0	25.4	17.5	217	CA 9 CA 2 AN 8 DM	
4016	Upper Morgan Creek	P	997.3	735.2	0	0	571.3	664.3	415.3	67.9	0	0	10.7	3.0	48	CA 48 CA 1 AN 2 DM	
4020	Wodkey Coulee	P	1719.9	209.0	0	0	1069.5	35.8	185.9	147.9	0	0	464.5	25.3	38	C 1 AN 5 DM 13 DM	
4021	Upper Little Snake	P	1406.3	0	0	0	550.4	0	849.0	0	0	0	6.9	0	13	DM 63 C 1 AN	
4026	E. S. Fork Rock Creek	P	1626.5	1209.6	0	0	1132.4	419.8	491.7	768.8	0	0	2.4	21.0	78	C 36 C 1 AN 4 DM	
4029	Upper E. Fork Willow	P	958.7	39.8	0	0	628.2	0	320.5	39.8	0	0	0	0	40	C 1 AN 2 DM	
4030	Two Mile Coulee	P	1935.5	1034.3	0	0	1244.5	992.2	458.4	29.7	0	0	232.6	12.4	81	C 81 C 1 AN 1 DM 1 DM 3 DM	
4031	Lower Little Snake	P	830.3	0	0	0	799.8	0	30.5	0	0	0	0	0	135	C 1 AN 2 DM	
4032	Lower Snake Creek	P	3928.1	3661.0	0	0	307.8	2233.1	1648.1	1661.0	1698.2	0	0	34.0	6.9	100	C 60 C 110 C 223 C 1 AN 4 DM
4035	Little Snake Creek	P	553.6	214.5	0	0	152.8	69.6	400.8	144.9	0	0	0	0	23	C 1 AN 1 DM	
4037	N. Snake Creek	P	569.3	206.0	0	0	551.3	206.0	18.0	0	0	0	0	0	223	C 1 AN 1 DM	
4038	S. Snake Creek	P	788.6	384.6	0	0	94.0	230.4	195.7	538.2	94.9	0	0	0	3	BEO 10 C 1 AN 2 DM	

SEASON OR USE	CURRENT ALMS		REC. STOCKING		FOTEN, PORAGE		ALTERNATIVE A ENHANC. COMBINED		ALTERNATIVE B CUNT. OF		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK		ALTERNATIVE F NO ACTION	
	BLM OTHER		RATE/ALMS		BLM OTHER		REC. USES		PRESENT MONT.		LIVST. PORAGE		WATERBANT/LIFE		CRATING		ST LT	
	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
06/01-06/30	370	52			401	57	684	112	370	431	370	370	401	717	278	409	370	370
04/01-03/31	3																	
04/01-03/31	12																	
06/16-06/30	286	371	422	427	665	607	286	349	286	286	422	757	220	276			286	286
07/21-09/10																		
04/01-03/31	2																	
04/01-03/31	10																	
04/16-07/19	574	362	660	360	1010	526	574	700	574	574	660	1325	185	281			574	574
10/14-11/01																		
04/01-03/31	3																	
04/01-03/31	12																	
03/01-02/28	28		39	313	57	429	28	34	28	28	39	62	12	15			28	28
04/01-03/31	2																	
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
03/01-05/15	984	208	1352	484	1925	678	984	1200	984	984	1352	2581	878	930			984	984
03/16-06/01																		
06/02-10/15																		
12/01-12/26																		
12/01-03/31	1																	
04/01-03/31	3																	
04/01-11/30	1																	
04/01-11/30	14																	
04/01-03/31	17																	
12/01-03/31	19																	
09/16-10/20	287		367	9	535	11	287	350	287	287	367	628	287	301			287	287
04/01-03/31	2																	
04/01-03/31	7																	
03/20-10/13	647	413	766	532	1231	779	647	789	647	647	766	1433	460	609			647	647
06/01-07/31																		
04/01-03/31	3																	
04/01-03/31	19																	
03/15-07/01	172		222	182	338	250	172	210	172	172	222	330	72	96			172	172
08/15-10/15																		
04/01-03/31	2																	
04/01-03/31	5																	
09/01-10/31	51	25	223	28	316	52	51	62	51	51	223	316	51	91			51	51
04/01-03/31	2																	
04/01-11/30	8																	
12/01-03/31	10																	
06/01-09/30	253		271		456		253	309	253	253	271	587	189	278			253	253
04/01-03/31	2																	
04/01-03/31	7																	
05/10-11/15	321	294	386	255	573	425	321	392	321	321	386	764	216	237			321	321
06/01-09/31																		
04/01-03/31	2																	
04/01-03/31	10																	
05/01-10/01	200		249	7	373	14	200	244	200	200	249	498	120	142			200	200
04/01-03/31	2																	
04/01-03/31	5																	
03/01/03/31	236	170	359	269	523	365	236	288	236	236	359	615	189	204			236	236
11/01-02/28																		
04/01-03/31	2																	
04/01-03/31	17																	
04/01-12/30	2																	
12/01-03/31	2																	
04/01-05/03	150		224		303		150	336	150	150	224	430					150	150
04/01-03/31	2																	
04/01-03/31	5																	
05/01-06/15	651	254	846	875	1314	1334	651	794	651	651	846	1540	428	551			651	651
05/15-09/20																		
03/15-06/15																		
08/01-09/22																		
04/01-03/31	2																	
04/01-03/31	10																	
06/01-10/01	94		120	48	211	81	94	174	94	94	120	271	71	123			94	94
04/01-03/31	2																	
04/01-03/31	2																	
06/15-07/05	117	38	158	64	213	85	117	143	117	117	158	286	34	34			117	117
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	159		177	113	303	150	159	230	159	159	177	448	119	166			159	159
03/01-02/28																		
04/01-03/31	2																	
04/01-03/31	5																	

VALLEY RESOURCE AREA PROPOSED AMF's CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MOT S/S	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4044	Genevieve Hall	P	406.9	0	0	0	34.0	0	372.9	0	0	0	0	0	31	1 AN 1 DM
4049	West Snake Creek	P	478.7	10.0	144.4	10.0	265.4	0	68.9	0	0	0	0	0	8	1 AN 1 DM
4052	Fat Reservoir	P	985.6	433.1	0	0	308.9	35.6	676.7	397.5	0	0	0	0	70	1 AN 2 DM 1 DM 3 DM
4056	Upper W. Porcupine	P	2379.5	1071.2	0	0	1862.7	347.9	360.7	722.2	150.9	0	5.2	1.1	140	6 C 1 AN 6 DM
4058	Rudy Reservoir	P	969.0	0	8.0	0	698.3	0	46.7	0	216.0	0	0	0	70	1 AN 2 DM
4059	Wards Dam	P	2341.9	1379.5	0	0	1990.4	1204.1	351.5	175.4	0	0	0	0	140	1 AN 5 DM
4061	Lower W. Porcupine	P	1322.2	1038.4	0	0	707.0	597.6	615.2	440.8	0	0	0	0	9	90 C 40 C 1 AN 3 DM
4066	Cache Creek	P	965.1	0	0	0	578.4	0	386.7	0	0	0	0	0	25	25 C 16 C 18 C 1 AN 2 DM
4067	Fapoose Creek	P	1758.1	636.4	0	0	1420.6	373.1	337.5	263.3	0	0	0	0	28	1 AN 8 DM
4068	Lower E. Fork Cache	P	1002.5	23.7	0	0	821.9	21.0	178.9	2.7	0	0	1.7	0	174	1 AN 1 DM
4069	Lower Unger Coulee	P	872.8	160.0	0	0	288.2	0	584.6	160.0	0	0	0	0	13	8 AN 9 AN 4 DM
4072	Upper East Fork Canyon Creek	P	1386.1	121.8	0	0	714.3	23.8	650.9	93.1	0	0	20.9	4.9	66	1 AN 4 DM
4079	S. Line Creek	P	2485.6	6.9	6.9	0	1717.1	0	722.4	6.9	0	0	0	39.2	20	2 AN 5 DM
4080	Hall Coulee	P	2041.1	1005.5	0	0	971.8	531.1	1053.4	471.4	14.8	2.0	1.1	1.0	60	120 C 1 AN 4 DM
4082	Black Coulee	P	1865.5	710.1	0	0	1504.9	615.5	341.5	89.8	0	0	19.1	4.8	20	65 C 65 C 84 C 1 AN 4 DM
4083	Lower S. Rock Creek	P	480.9	0	115.9	0	344.6	0	19.8	0	0	0	0.6	0	8	2 AN 1 AN 1 AN 1 DM
4089	Alkali Creek	P	917.8	237.5	0	0	381.5	136.8	336.5	100.7	197.8	0	2.0	0	41	24 C 1 AN 2 DM
4091	Lower Bear Creek	P	799.2	470.5	0	0	359.6	26.0	438.3	444.5	0	0	1.3	0	67	1 AN 2 DM
4098	Lower Buggy Creek	P	153.3	103.6	0	0	87.4	42.7	65.9	60.9	0	0	0	0	12	9 HO 1 AN 1 DM

SEASON OF USE	CURRENT AUMs		REC. STOCKING RATE/AUMs	POTEN. FORAGE PRODUCTION			ALTERNATIVE A ENHANC. COMBINED Vtg. DEES		ALTERNATIVE B COMB. OF PRESENT MONT.		ALTERNATIVE C ENHANCED INSTR. FORAGE		ALTERNATIVE D ENHANCED WATERMNT. H. FFE		ALTERNATIVE E NO LIVESTOCK CHAZING		ALTERNATIVE F NO ACTION	
	BLM	OTHER		BLM	OTHER	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
05/01-07/31	94						94	173		94	94							
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	100		152	3	191	3	100	122	100	100	152	242	68	68			100	100
04/01-03/31	2																	
05/01-09/25	231	107	227	89	389	169	231	282	231	231	227	475	126	229			231	231
04/01-03/31	2																	
04/01-03/31	5																	
04/01-11/30	2																	
12/01-03/31	2																	
05/16-09/30	393	257	546	204	807	350	393	479	393	393	546	1037	266	272			393	393
06/21-09/25	2																	
04/01-03/31	2																	
04/01-03/31	14																	
03/01-09/13	310		233		373		310	378	310	310	233	424	170	181			310	310
04/01-03/31	2																	
04/01-03/31	5																	
05/01-11/06	535	335	579	341	816	481	535	653	535	535	579	1124	364	374			535	535
04/01-03/31	2																	
04/01-03/31	12																	
04/20-10/30	335		281	219	446	344	335	409	335	335	281	467	217	255			335	335
06/01-08/05																		
06/20-08/23																		
04/01-03/31	2																	
04/01-03/31	7																	
04/16-05/15	244		232		362		244	264	244	244	232	372	174	198			244	244
08/16-10/04																		
06/01-09/30																		
05/16-10/15																		
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	339		454	152	650	236	339	414	339	339	454	771	228	228			339	339
04/01-03/31	2																	
04/01-03/31	19																	
06/16-07/15	174		254	6	365	8	174	212	174	174	254	425	87	87			174	174
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	158		202	31	348	61	158	193	158	158	202	417	106	182			158	158
12/01-03/31	4																	
04/01-11/30	5																	
04/01-03/31	10																	
04/15-09/15	318	14	280	19	438	34	318	430	318	318	280	628	158	232			318	318
04/01-03/31	2																	
04/01-03/31	10																	
04/16-04/30	456		532	1	802	3	456	556	456	456	532	914	446	487			456	456
04/01-03/31	3																	
04/01-03/31	12																	
04/01-05/30	393	247	479	236	775	375	393	479	393	393	479	941	247	438			393	393
05/30-10/09																		
04/01-03/11	2																	
04/01-03/11	10																	
04/15-05/01	343	187	429	162	618	238	343	418	343	343	429	855	244	244			343	343
05/01-05/11																		
05/12-05/31																		
06/01-11/15																		
04/01-03/31	2																	
04/01-03/31	10																	
03/01-02/28	99		146		182		99	121	99	99	146	198	63	76			99	99
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
06/16-10/15	179	51	185	60	345	95	179	218	179	179	185	324	163	207			179	179
07/01-10/15																		
04/01-03/31	2																	
04/01-03/31	5																	
05/16-09/15	168	100	182	98	295	190	168	205	168	168	182	361	105	138			168	168
04/01-03/31	2																	
04/01-03/31	5																	
07/01-09/30	37	18	41	25	64	42	37	45	37	37	41	60	35	45			37	37
10/01-11/15																		
04/01-03/31	2																	
04/01-03/31	2																	

VALLEY RESOURCE AREA PROPOSED AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MCT SYS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		CHAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4055	Upper Coulee	P	593.3	355.3	0	0	361.8	84.0	233.7	81.3	0	14.9	0	0	17	C
															27	C
															5	AN
															1	AN
															2	DM
4100	S. Spring Creek	P	317.7	159.6	0	0	29.0	7.8	288.7	151.8	0	0	0	0	2	NO
															5	C
															3	AN
															1	AN
															3	DM
															1	DM
															1	DM
4101	Antelope Spring	P	1217.9	427.3	0	0	712.8	142.6	490.2	284.7	14.9	0	0	0	31	C
															26	C
															3	AN
															1	AN
															1	AN
															3	DM
4102	Dry Coulee	P	2451.3	425.2	0	0	1404.0	139.9	1047.5	283.3	0	0	0	0	43	C
															33	C
															16	C
															6	AN
															1	AN
															1	AN
															5	DM
4105	Upper Mooney Coulee	P	913.7	184.3	0	0	656.0	153.3	257.7	31.0	0	0	0	0	18	C
															10	AN
															1	AN
															2	DM
4106	Upper Richardson	P	3247.6	167.7	34	0	2071.0	92.9	1092.0	74.8	50.6	0	0	0	20	C
															1	C
															19	C
															82	C
															14	AN
															1	AN
															1	AN
															1	AN
															6	DM
															13	C
4109	Cherry Creek	P	3821.3	559.2	0	0	2908.9	177.7	748.8	381.0	0	0	163.6	0.5	1	C
															1	C
															38	C
															45	C
															140	C
															140	C
															38	Y
															28	AN
															2	AN
															1	AN
															16	DM
															2	DM
															6	DM
4111	Poss Coulee	P	2809.0	359.3	0	0	1781.8	336.0	918.2	22.8	74.8	0	34.2	0.5	102	C
															15	C
															10	AN
															1	AN
															1	AN
															6	DM
4112	Upper Spring Creek	P	4143.5	2437.5	0	0	2132.7	904.9	1455.1	1529.0	517.2	0	38.5	3.6	260	C
															3	AN
															8	DM
4117	Chapman Coulee	P	779.9	25.9	0	0	719.0	25.9	60.9	0	0	0	0	0	10	C
															2	AN
															1	AN
															1	AN
															2	DM
4121	Lower Cherry Creek	P	1846.8	52.7	0	0	1276.0	0	570.8	52.7	0	0	0	0	122	C
															30	C
															2	AN
															1	AN
															1	AN
															4	DM
4125	Lower Porcupine Creek	P	346.4	608.2	0	0	190.0	246.6	94.0	290.8	0	0	65.4	70.8	2	C
															3	AN
															1	AN
															1	AN
															1	DM
4200	Lower Porcupine Creek	P	701.1	43.9	0	0	332.1	35.2	306.2	0	0	0	62.8	8.7	16	C
															8	AN
															1	AN
															1	DM

SEASON OF USE	CURRENT BLM	AIDS OTHER	REC. STOCKING RATE/AIMS		ROTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED TRC. USES		ALTERNATIVE B COURT. OF PRESENT MONT.		ALTERNATIVE C ENHANCED LVT. FORAGE		ALTERNATIVE D ENHANCED WATER/STOCK/LIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
			BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
05/01-09/30	111		139	34	221	58	111	133	111	111	139	213	77	92			111	111
10/01-03/31																		
12/01-03/31	3																	
04/01-11/30	1																	
04/01-03/31	5																	
03/01-02/28	78		62	31	119	60	78	118	78	78	62	119	48	74			78	78
03/01-02/28																		
12/01-03/31	2																	
04/01-11/30	1																	
12/01-03/31	2																	
04/01-11/30	2																	
04/01-03/31	2																	
04/16-10/15	244	63	294	96	434	165	244	298	244	244	294	386	159	201			244	244
05/15-10/15																		
12/01-03/31	2																	
04/01-11/30	1																	
04/01-03/31	7																	
04/16-10/15	482	82	612	99	954	169	482	588	482	482	612	1215	282	373			482	482
04/16-10/15																		
12/01-03/31	2																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	14																	
03/01-02/28	210		235	49	344	70	210	256	210	210	235	462	138	155			210	210
12/01-03/31	5																	
04/01-11/30	1																	
04/01-03/31	5																	
05/16-10/15	613	57	797	41	1208	64	613	748	613	613	797	1581	429	512			613	613
06/10-10/15																		
05/16-10/15																		
12/01-03/31	7																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
04/01-03/31	14																	
05/16-10/15																		
03/01-05/31	668	95	817	128	1174	226	668	813	668	668	817	1404	414	478			668	668
10/01-02/28																		
05/01-05/30																		
05/01-05/31																		
05/01-06/10																		
07/10-09/12																		
06/10-09/30																		
12/01-03/31	15																	
04/01-11/30	2																	
04/01-03/31	2																	
12/01-03/31	13																	
04/01-11/30	3																	
04/01-03/31	14																	
05/05-11/05	553	69	620	88	964	121	553	675	553	553	620	1033	359	417			553	553
05/05-11/05																		
12/01-03/31	5																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	14																	
05/01-11/15	906	788	825	310	1392	865	906	1105	906	906	825	1787	635	906			906	906
04/01-03/31	19																	
03/01-02/28	124		230	7	314	10	124	151	124	124	230	348	84	106			124	124
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	5																	
04/15-09/24	824		455	11	683	21	824	1005	824	824	455	885	515	543			824	824
04/15-09/30																		
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	10																	
03/01-02/28	30		49	102	74	169	30	37	30	30	49	66	22	33			30	30
12/01-03/31	2																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
05/01-11/01	97		120	7	193	10	97	117	97	97	120	216	81	101			97	97
12/01-03/31	4																	
04/01-11/30	1																	
04/01-03/31	2																	

VALLEY RESOURCE AREA PROPOSED AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		CRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4308	Spring Creek	P	2937.7	2162.2	50.0	88.8	2384.1	1830.4	477.6	224.8	0	0	46.0	18.2	246	9 3 2 AN 6 DM
4309	West Fork	P	3126.1	3240.9	0	0	2686.1	2824.1	435.2	414.0	0	0	4.8	2.8	112	C 12 C 62 C 45 C 6 AN 1 AN 1 AN 7 DM
4312		P	318.8	319.2	0	0	113.9	227.6	199.1	91.6	0	0	5.8	0	6	C 2 AN 1 AN 1 AN 1 DM
4510	Big Coulee	P	755.5	169.7	0	0	260.7	38.0	474.5	131.7	0	0	20.3	0	3	DM 20 C 3 C 1 AN 3 DM
4511	Kent Coulee	P	516.6	0	0	0	516.6	0	0	0	0	0	0	0	4	C 1 AN 2 DM
4512	McNab Coulee	P	1109.5	474.6	0	0	688.2	223.2	411.2	246.7	0	0	0	0	351	C 175 C 2 AN 5 DM
4513	Rattlesnake (Allot)	P	902.0	10.9	0	0	902.0	10.9	0	0	0	0	0	0	28	C 1 AN 4 DM
4514	Upper McNab Coulee	P	2172.1	717.3	0	0	2087.3	717.3	84.8	0	0	0	0	0	97	C 3 AN 8 DM
4515	Chain Reservoir	P	319.3	0	0	0	156.5	0	162.8	0	0	0	0	0	105	C 1 AN 1 DM
4516	Inne Pasture	P	340.8	1164.1	0	0	212.0	948.8	128.8	214.2	0	0	0	1.1	9	C 1 AN 1 DM
4518	Ash Coulee	P	735.3	687.9	0	0	298.9	149.6	436.1	538.3	0	0	0.3	0	14	C 1 AN 2 DM
4519	Larb Creek	P	3073.8	2014.3	0	0	2286.0	1831.8	787.8	182.5	0	0	0	0	304	C 304 C 5 AN 15 DM
4521	Upper Buffalo Coulee	P	714.6	0	0	0	23.7	0	674.1	0	0	0	16.8	0	35	C 131 AN 1 DM
4527	Sandstone Allot.	P	1894.1	413.0	0	0	1266.2	185.4	627.9	227.6	0	0	0	0	100	C 100 C 3 AN 7 DM
4529	Square Coulee	P	730.0	291.2	0	0	364.5	90.6	364.0	197.8	0	0	1.5	2.8	20	C 2 AN 3 DM
4533	Upper Antelope Creek	P	1879.9	2382.9	0	0	668.2	1214.0	1175.2	1156.6	0	0	36.5	7.3	180	C 3 AN 4 DM
4534	North Fork - Antelope Creek	P	2646	2764.8	0	0	980.6	376.2	1615.0	2366.7	0	0	50.4	21.9	84	C 3 AN 5 DM
4538	Lower Hardscrabble	P	1117.3	592.4	0	0	114.6	23.3	993.3	564.7	0	0	9.4	4.4	57	C 2 AN 2 DM
4541	Lower Hay Coulee	P	569.0	318.9	0	0	8.7	558.7	305.3	0	0	10.3	4.9	28	C 1 AN 1 DM	

SEASON OF USE	CURRENT AUMs		REC. STOCKING RATE/AUMs		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENGRS. COMBINED		ALTERNATIVE B COVF. OF		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21	04/10-10/21
06/15-08/15	631	474	689	550	977	799	631	770	631	631	689	1171	367	398			631	631
04/01-03/31	3																	
04/01-03/31	14																	
04/16-10/15	674	932	735	817	1028	1153	674	822	674	674	735	1394	406	414			674	674
05/01-10/31																		
04/16-09/20																		
04/20-10/19																		
12/01-03/31	3																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	17																	
03/01-02/28	54		65	82	107	119	54	66	54	54	65	117	40	65			54	54
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
12/01-03/31	107		140	34	232	61	107	131	107	107	140	269	44	85			107	107
04/15-10/15																		
04/15-10/15																		
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	54		145		194		54	82	54	54	145	227	38	38			54	54
04/01-03/31	2																	
04/01-03/31	5																	
03/05-03/25	228	116	248	99	379	159	228	278	228	228	248	405	158	188			228	228
03/26-04/12																		
04/01-03/31	3																	
04/01-03/31	12																	
04/01-11/01	199		249	3	334	4	199	243	199	199	249	388	144	157			199	199
04/01-03/31	2																	
04/01-03/31	10																	
05/01-10/31	463	124	577	189	775	254	463	565	463	463	577	1056	310	626			463	463
04/01-03/31	5																	
04/01-03/31	19																	
06/21-07/12	76		72		116		76	93	76	76	72	134	49	60			76	76
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	108		85	306	130	434	108	132	108	108	85	145	80	91			108	108
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	172		169	146	282	265	172	210	172	172	169	305	116	145			172	172
04/01-03/31	2																	
04/01-03/31	5																	
05/01-06/15	819	617	801	541	1166	746	819	999	819	819	801	1416	712	746			819	819
07/16-10/31																		
04/01-03/31	8																	
04/01-03/31	36																	
06/23-10/20	138		114		223		138	170	138	138	114	223	133	189			138	138
04/01-03/31	2																	
04/01-03/31	2																	
05/05-06/21	358	60	463	94	701	154	358	440	358	358	463	882	232	260			358	358
07/12-10/02																		
04/01-03/31	5																	
04/01-03/31	17																	
05/01-10/31	116		149	50	236	86	116	142	116	116	149	263	77	97			116	116
04/01-03/31	3																	
04/01-03/31	7																	
05/01-10/31	456	621	390	546	659	866	456	593	456	456	390	769	310	400			456	456
04/01-03/31	5																	
04/01-03/31	10																	
05/01-10/31	504		506	500	853	936	504	693	504	504	506	941	342	467			504	504
04/01-03/31	5																	
04/01-03/31	12																	
05/10-11/09	229	113	200	107	370	208	229	347	229	229	200	365	164	242			229	229
04/01-03/31	3																	
04/01-03/31	5																	
05/01-10/15	97	61	85	48	170	95	97	118	97	97	85	165	63	106			97	97
04/01-03/31	2																	
04/01-03/31	2																	

VALLEY RESOURCE AREA PROPOSED AMPS CONTINUED

ALLOT. NO.	ALLIOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION		FAIR		POOR		UNSATISFACTORY		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4542	Antelope Creek	P	2836.1	7294.6	14.1	536.6	1157.7	2031.0	1614.5	4639.9	0	0	0	0	69.8	87.1	315	C
																	330	C
																	117	C
																	7	AN
																	13	DM
4543	Lower Antelope Creek	P	479.3	0	0	0	0	0	478.2	0	0	0	0	0	1.1	0	17	C
																	17	C
																	1	AN
																	1	DM
4545	Tampani Coulee	P	229.9	48.5	29.7	10.9	199.1	37.5	0	0	0	0	0	0	0	0	4	C
																	1	AN
																	1	DM
4547	Upper Box Elder Creek	P	590.1	478.5	0	0	0	9.5	586.7	461.9	0	0	0	0	3.4	7.1	80	C
																	1	AN
																	1	DM
4552	Upper Little Beaver	P	11269.2	49.4	0	0	7355.6	14.2	3189.5	34.1	0	0	0	0	724.1	1.1	35	C
																	47	C
																	60	C
																	30	C
																	16	AN
4555	Bullock Coulee	P	2082.4	908.9	0	0	735.2	379.9	1304.5	509.9	0	0	0	0	42.7	19.1	100	C
																	3	AN
																	4	DM
4556	Hay Fever	P	669.3	376.0	0	0		23.6	649.3	349.4	0	0	0	0	20.0	3.0	100	C
																	1	AN
																	1	DM
4558	Wire Net Corral Pasture	P	567.4	0	0	0	0	0	567.4	0	0	0	0	0	0	0	80	C
																	84	C
																	1	AN
																	2	DM
4559	South Brazil Creek	P	318.3	40.0	42.8	0	265.2	0	8.8	40.0	0	0	0	0	1.5	0	67	C
																	1	AN
																	1	DM
4560	Lower Brazil Creek	P	1849.4	3037.3	0	0	855.45	558.4	558.7	956.0	2400.4	0	0	0	38.0	78.2	41	C
																	118	C
																	30	C
																	38	C
																	4	AN
																	6	DM
4564	Alkali Coulee	P	983.2	524.3	0	0	90.9	5.8	888.2	514.4	0	0	0	0	4.1	4.1	4	C
																	4	C
																	17	C
																	4	C
																	1	AN
																	1	DM
4650	Roanwood Coulee	P	399.2	179.2	82.0	0	211.6	128.7	105.6	50.5	0	0	0	0	0	0	6	C
																	1	AN
																	1	DM
4652	N. Roanwood Coulee	P	319.7	0	0	0	274.7	0	45.0	0	0	0	0	0	0	0	9	C
																	1	AN
																	1	DM
4654	E. Coal Creek	P	320	6.0	0	0	237.0	6.0	83.0	0	0	0	0	0	0	0	4	C
																	1	AN
																	1	DM
4655	N. Poplar River	P	638.6	178.1	186.9	73.8	347.2	102.5	104.5	1.8	0	0	0	0	0	0	14	C
																	1	AN
																	1	DM
4657	Rock Creek Divide	P	476.7	0	0	0	387.8	0	88.9	0	0	0	0	0	0	0	9	C
																	1	AN
																	2	DM
4660	S. Poplar River	P	571.1	42.9	80.9	0	466.2	42.9	24.0	0	0	0	0	0	0	0	8	C
																	1	AN
																	6	DM
4664	Upper Spring Creek	P	359.3	0	0	0	326.4	0	32.9	0	0	0	0	0	0	0	15	C
																	1	AN
																	1	DM
4665	Middle Fork Forcupine	P	714.3	28.8	274.8	0	340.7	28.8	98.8	0	0	0	0	0	0	0	16	C
																	1	AN
																	1	DM

SEASON OF USE	CURRENT AUM		REC. STOCKING		ROTN. FORAGE		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
	BLM	OTHER	BATE/ACMA	OTHER	BLM	OTHER	ENHANC. COMBINED WGS. TESTS	ST	LT	COST. OF PASTURE MONT.	ST	LT	ENHANCED LVT. FORAGE	ST	LT	NO LIVESTOCK GRAZING	ST	LT
04/01-06/30	801	1629	498	1494	825	2402	801	1039	801	801	498	946	450	550			801	801
07/01-11/15		117																
04/16-05/16																		
04/01-03/31	11																	
04/01-03/31	31																	
04/01-06/01	84		89		178		84	102	84	84	89	180	78	126			84	84
10/07-12/31																		
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	52		66	15	85	19	52	63	52	52	66	91	36	49			52	52
04/01-03/31	2																	
04/01-03/31	2																	
04/20-08/16	144	166	103	78	205	154	144	176	144	144	103	238	57	201			144	144
04/01-03/31	2																	
04/01-03/31	2																	
03/01-10/31	1032		1843	7	2708	12	1032	1259	1032	1032	1843	2420	688	1025			1032	1032
03/01-10/31																		
05/01-10/31																		
05/01-10/31	25																	
04/01-03/31	55																	
06/09-10/20	299	139	357	158	604	262	299	365	299	299	357	646	249	399			299	299
04/01-03/31	5																	
04/01-03/31	10																	
04/17-06/08	101	71	97	63	193	123	101	123	101	101	97	162					101	101
04/01-03/31	2																	
04/01-03/31	2																	
04/21-04/30	111		96		191		111	135	111	111	96	183	111	156			111	111
10/16-11/15																		
04/01-03/31	2																	
04/01-03/31	5																	
10/16-11/15	75		82	7	103	13	75	92	75	75	82	118	75	75			75	75
04/01-03/31	2																	
04/01-03/31	2																	
05/10-10/15	502	435	345	500	569	919	502	612	502	502	345	529	386	466			502	502
06/01-10/07																		
06/15-08/31																		
07/15-10/31																		
04/01-03/31	6																	
04/01-03/31	14																	
03/01-03/31	43	138	180	84	339	165	43	142	43	43	180	317	30	95			43	43
04/01-11/30																		
04/01-11/30																		
12/01-02/28	2																	
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	68		127	53	182	83	68	90	68	68	127	202	44	59			68	68
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	54		71		96		54	66	54	54	71	108	18	21			54	54
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	46		133				46	135	46	46	133	198	30	85			46	46
04/01-03/31	2																	
04/01-03/31	2																	
04/20-11/30	104		183	57	236	67	104	127	104	104	183	291	71	71			104	104
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	107		119		171		107	131	107	107	119	237	71	71			107	107
04/01-03/31	2																	
04/01-03/31	5																	
03/01-02/28	100		235	12	317	16	100	122	100	100	235	367	68	89			100	100
04/01-03/31	2																	
04/01-03/31	14																	
06/01-09/30	60		127		189		60	73	60	60	127	229	45	45			60	60
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	132		242	9	297	11	132	161	132	132	242	326	88	167			132	132
04/01-03/31	2																	
04/01-03/31	2																	

VALLEY RESOURCE AREA PROPOSED AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MCT	ACRES			EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		CRAZING ANIMALS	
			SIS	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4666	Hell Coulee	P		159.6	0	0	0	0	0	159.6	0	0	0	0	0	2	C
																1	AN
																1	DM
4704	North Rock Creek	P		497.4	1118.5	0	0	363.5	511.2	120.6	578.4	0	0	13.3	28.9	12	C
																1	AN
																2	DM
4705	Line Coulee	P		560.4	311.0	0	0	462.9	311.0	97.2	0	0	0	0.3		106	C
																106	C
																1	AN
																1	DM
4709	Thoeny	P		671.0	468.4	90.0	146.6	472.0	270.0	109.0	51.8	0	0	0	0	13	C
																9	AN
																1	AN
																1	AN
																1	DM
4710	South Thoeny	P		400.2	0	0	0	323.2	0	77.0	0	0	0	0	0	88	C
																3	AN
																1	AN
																1	AN
																1	DM
4712	Lower E. Fork Crow	P		1960.0	3691.4	60.0	904.2	1668.0	2604.7	224.0	175.9	0	0	8.0	6.6	200	C
																650	C
																1	AN
																4	DM
4714	Rock Creek	P		1259.5	498.1	0	0	493.2	123.3	766.3	374.8	0	0	0	0	20	C
																8	AN
																1	AN
																1	AN
																3	DM
4717	Willow Creek	P		3774.2	2039.2	0	0	1818.1	1532.5	1649.3	507.6	0	0	306.8	19.1	119	C
																120	C
																31	C
																8	AN
																1	AN
																2	AN
																77	DM
4719	Middle Rock Creek	P		420.5	984.5	6.0	2.0	164.2	723.1	224.8	257.2	24.8	0	0.7	2.2	17	C
																120	C
																3	DM
																1	DM
																1	DM
4720	Oregon Reservoir	P		135.2	1805.5	0	0	128.3	1130.2	6.9	654.5	0	0	0	20.8	5	C
																5	C
																1	AN
																1	DM
4721	Clara Reservoir	P		2561.4	478.7	175.7	0	1300.7	165.6	856.4	259.5	0	0	228.6	53.6	71	C
																2	AN
																12	DM
4725	South Willow Creek	P		317.9	3651.0	14.0	367.2	273.7	2156.7	25.5	1117.9	0	0	4.7	9.2	26	C
																26	C
																4	AN
																1	AN
																1	AN
																5	DM
																1	DM
																1	DM
4727	S. Rock Creek	P		1110.0	0	346.0	0	643.0	0	120.0	0	0	0	1.0	0	20	C
																15	AN
																1	AN
																1	AN
																7	DM
4728	Line Creek	P		2498.4	3088.4	118.9	292.5	2339.9	2779.9	132.7	14.0	6.9	0	0	2.0	100	C
																4	C
																3	AN
																1	AN
																5	DM
0470	Gray, Donald H.	P		39.7	0	0	0	39.7	0	0	0	0	0	0	0	1	C
																1	AN
																1	DM
0475	Wayne Crimrud	P		926.0	0	69.0	0	401.9	0	177.3	0	0	0	297.8	0	26	C
																1	AN
																4	DM
																8	DM
																1	DM

SEASON OF USE	CURRENT AUMs		REC. STOCKING		POTEN. PORACE		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
	BLM	OTHER	RATE/AUMs		PRODUCTION		EMBAT. COMPTMS		CONV. OF		EMBAQ. QD		EMBAQ. QD		NO LIVESTOCK		NO ACTION	
			BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	30		34		108		30	37	30	30	54	88	30	30			30	30
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	141		130	239	188	385	141	172	141	141	130	192	73	148			141	141
04/01-03/31	2																	
04/01-03/31	5																	
06/01-06/30	133	77	159	85	222	113	133	162	133	133	159	262	66	79			133	133
11/01-11/30	2																	
04/01-03/31	2																	
03/01-02/28	155		182	140	248	173	155	189	155	155	182	348	103	114			155	155
12/01-03/31	5																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
11/01-11/30	88		107		153		88	107	88	88	107	154	76	102			88	88
12/01-03/31	2																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
04/10-07/15	397	1397	579	1029	721	1288	397	484	397	397	579	837	279	292			397	397
11/02-12/24	2																	
04/01-03/31	2																	
04/01-03/31	10																	
03/01-02/28	234		303	115	500	200	234	285	234	234	303	489	162	311			234	234
12/01-03/31	4																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	7																	
07/01-09/30	927	129	688	489	1078	707	927	1131	927	927	688	1172	846	1042			927	927
06/08-10/31																		
07/01-10/30																		
12/01-03/31	4																	
04/01-11/30	1																	
04/01-03/31	3																	
04/01-03/31	185																	
04/15-08/01	60		95	248	164	363	60	73	60	60	95	137	9	35			60	60
04/01-03/31	2																	
12/01-03/31	2																	
04/01-11/30	2																	
04/01-03/31	2																	
03/01-03/26	22		38	424	52	643	22	27	22	22	38	71	22	22			22	22
11/15-02/28	2																	
04/01-03/31	2																	
04/01-03/31	2																	
05/10-10/08	285	67	478	78	709	130	285	348	285	285	478	787	187	345			285	285
04/01-03/31	3																	
04/01-03/31	29																	
03/20-05/01	64		86	987	116	1418	64	78	64	64	86	209					64	64
12/01-01/01	2																	
12/01-03/31	2																	
04/01-11/30	1																	
04/01-03/31	2																	
12/01-03/31	4																	
04/01-11/30	2																	
04/01-03/31	2																	
03/01-02/28	245		326		408		245	299	245	245	326	448	160	185			245	245
12/01-03/31	8																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	17																	
04/20-10/30	393	256	704	904	945	1172	393	479	393	393	704	1298	248	248			393	393
06/20-10/30	2																	
12/01-03/31	2																	
04/01-11/30	1																	
04/01-03/31	12																	
03/01-02/28	13		9		12		13	16	13	13	9	9	9	9			13	13
04/01-03/31	2																	
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	307		140		219		307	375	307	307	140	216	203	235			307	307
04/01-03/31	2																	
04/01-11/30	6																	
12/01-03/31	6																	
04/01-03/31	2																	

VALLEY RESOURCE AREA PROPOSED AMPS (Not proposed in Alternative B) CONTINUED

ALLOT. NO.	ALLIEMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSATISFACTORY		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
0479	Halvorsen, Oliver	F	559.0	0	34.3	0	220.1	0	36.2	0	0	0	268.4	0	16	C
															1	AN
															3	DM
															6	DM
0482	William Harmon Farm	F	435.0	0	5.5	0	323.2	0	14.9	0	0	0	91.4	0	14	C
															1	AN
															1	DM
															2	DM
															6	DM
															10	DM
0499	Archib Lewis	F	313.0	0	146.4	0	99.5	0	99.5	0	14.9	0	54.2	0	8	C
															1	AN
															1	DM
0525	Lester V. Rono	F	473.1	0	203.3	0	63.7	0	53.3	0	0	0	152.8	0	40	C
															1	AN
															2	DM
															5	DM
0526	Alice Morris Rovnan	F	239.9	0	0	0	87.0	0	152.9	0	0	0	0	0	8	C
															8	C
															1	AN
															6	DM
															2	DM
0538	John Simard	F	96.0	0	0	0	0	0	96.0	0	0	0	0	0	8	C
															1	AN
															1	DM
															1	DM
															2	DM
															4	DM
0557	Wilson Mabel	F	670.9	0	114.3	0	293.3	0	16.1	0	0	0	247.2	0	32	C
															1	AN
															3	DM
															8	DM
SUB TOTAL			151468	78269	2607	2836	90320	43270	53052	31510	1269	16	4220	636		

SEASON OF USE	CURRENT AUMs		REG. STOCKING		POTEN. FORAGE		ALTERNATIVE A ENHANC. COMBINED		ALTERNATIVE B CONC. OF		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK		ALTERNATIVE F NO ACTION	
	BLM	OTHER	RATE/AUMs		PRODUCTION		REC. USES		PRESENT MGMT.		LVST. FORAGE		WATER/ACRE/LIFE		GRAZING			
			BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	187		63		102		187	228	187	187	63	98	123	123			187	187
04/01-03/31	2																	
04/01-11/30	5																	
12/01-03/31	5																	
03/01-02/28	171		57		86		171	209	171	171	57	108	115	134			171	171
04/01-03/31	2																	
04/01-11/30	2																	
12/01-03/31	2																	
04/01-11/30	10																	
12/01-03/31	8																	
03/01-02/28	91		67		78		91	110	91	91	67	104	59	59			91	91
04/01-03/31	2																	
01/01-03/31	2																	
05/01-08/31	160		84		107		160	195	160	160	84	103	80	94			160	160
04/01-03/31	2																	
04/01-11/30	3																	
12/01-03/31	4																	
03/01-04/30	60		57		97		60	72	60	60	57	74					60	60
09/15-12/28	4																	
04/01-03/31	2																	
04/01-11/30	10																	
04/01-11/30	5																	
05/01-09/30	42		41		80		42	51	42	42	41	62	26	37			42	42
04/01-03/31	2																	
04/01-11/30	2																	
12/01-03/31	1																	
04/01-11/30	5																	
12/01-03/31	3																	
04/01-10/31	227		107		148		227	277	227	227	107	155	131	131			227	227
04/01-03/31	2																	
04/01-11/30	5																	
04/01-03/31	19																	
29256 12396			33441	18259	50511	27672	29256	36466	29256	29256	33441	59575	19738	25078			29256	29256

VALLEY RESOURCE AREA PROPOSED AMPs IN ALTERNATIVE B (Also proposed in Alternatives A, C and D)

ALLOT. NO.	ALLOTMENT NAME	NCT STS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		CHAILING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4005	Flint Reservoir	P	1427.9	316.1	0	0	176.9	0	1251.0	316.	0	0	0	0	85	CA
															1	AN
															3	DM
4009	Chambers Creek	P	1469.4	238.3	0	0	285.2	83.6	1184.2	154.7	0	0	0	0	100	CA
															1	AN
															3	DM
4015	South Creek	P	11508	5986.4	400.8	10.8	4599.6	2514.0	6463.9	3432.0	0	0	43.7	29.6	440	CA
															8	AN
															7	DM
															22	DM
															19	DM
4019	Snake Creek	P	6834.3	575.5	0	0	1415.8	306.8	5107.5	187.7	0	0	311.0	81.0	75	C
															64	C
															108	C
															6	AN
															27	DM
4023	Chambers Coulee	P	4944.7	1110.7	0	0	3116.4	518.7	1548.8	539.4	0	0	279.5	64.6	120	C
															175	C
															260	C
															260	C
															14	AN
															1	AN
															2	AN
															12	DM
4024	Divide	P	6993.8	2783.7	74.9	30.8	1273.5	469.9	4845.3	2139.8	0	0	800.1	143.2	415	SH
															250	C
															125	SH
															421	SH
															4	AN
															2	DM
															5	DM
															13	DM
4025	South Fork - Rock Creek	P	9215.9	2840.7	73.8	101.6	3094.1	1133.9	5854.6	1385.0	4.8	0	188.6	20.2	120	C
															462	C
															317	C
															200	C
															5	AN
															20	DM
															11	DM
															54	DM
4054	South Fork Bitter Creek	P	14668.2	1567.1	0	0	2379.0	722.4	9051.3	669.7	56.9	0	3181.0	175.0	16	C
															740	CA
															8	AN
															34	AN
															1	AN
															19	DM
															134	DM
															45	DM
4055	West Fork Porcupine	P	10904.1	4642.8	203.8	32.3	5754.1	2502.0	4344.7	2020.2	0	0	601.5	88.3	740	C
															8	AN
															76	DM
															15	DM
															15	DM
4071	Upper Canyon Creek	P	10270.8	1268.2	0	0	1662.2	543.3	7450.3	548.9	0	0	1158.3	176.0	235	C
															11	AN
															6	AN
															1	AN
															8	DM
															36	DM
															20	DM
															14	DM
4092	Upper Unger Coulee	P	2304.3	1512.4	0	0	589.9	113.4	1666.9	1377.6	0	0	47.5	21.4	144	CA
															144	CA
															2	CA
															12	AN
															1	AN
															1	AN
															7	DM
															2	DM
															4	DM
4113	Spring Coulee	P	1339.2	0	0	0	261.6	0	942.7	0	131.7	0	3.2	0	14	C
															45	C
															67	C
															1	AN
															3	DM

SEASON OF USE	CURRENT AUMs		REC. STOCKING RATE/AUMs		POTENTIAL PRODUCTION		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
							ENHANCED VEG. USES		COST. OF PRESENT MGMT.		ENHANCED LVST. FORAGE		ENHANCED WATERAVAIL/LF		NO LIVESTOCK CHAZING		NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
05/01-09/31	330		250	53	466	106	330	379	330	379	250	583	246	391			330	330
04/01-03/31	2																	
04/01-03/31	7																	
07/01/08/30	347	62	314	52	565	85	347	423	347	423	314	462	338	401			347	347
04/01-03/31	2																	
04/01-03/31	7																	
05/05-07/05	2268	1087	2380	1241	3821	2016	2268	2767	2268	2767	2380	4497	1710	2273			2268	2268
07/06-10/31																		
04/01-03/31	13																	
04/01-11/30	11																	
04/01-03/31	53																	
12/01-03/31	15																	
05/15-10/14	981	51	1129	92	2029	142	981	1197	981	1197	1129	2198	779	1322			981	981
06/21-10/10																		
06/01-09/30																		
04/01-03/31	6																	
04/01-03/31	65																	
05/01-05/15	800	150	1049	223	1569	357	800	976	800	976	1049	1983	454	570			800	800
05/16-05/31																		
06/01-06/30																		
08/30-11/03																		
12/01-03/31	7																	
04/01-11/30	1																	
04/01-03/31	3																	
04/01-03/31	29																	
06/01-10/05	1092	489	1020	435	1825	791	1092	1332	1092	1332	1020	1939	974	1445			1092	1092
07/20-10/13																		
06/01-10/05																		
06/06-10/05																		
04/01-03/31	6																	
04/01-11/30	3																	
12/01-03/31	4																	
04/01-03/31	31																	
05/15-05/15	1896	660	1774	591	2576	923	1896	2313	1896	2313	1774	3408	1681	2152			1896	1896
05/16-09/30																		
10/01-10/31																		
11/01-11/15																		
04/01-03/31	8																	
04/01-11/30	32																	
04/01-03/31	26																	
12/01-03/31	43																	
07/01-09/30	1333	172	1811	271	3202	422	1333	1629	1333	1629	1811	2790	1333	1946			1333	1333
08/31-10/29																		
04/01-03/31	13																	
12/01-03/31	18																	
04/01-11/30	1																	
04/01-03/31	46																	
12/01-03/31	107																	
04/01-11/30	72																	
04/15-08/30	2314		2201	982	3395	1533	2314	2823	2314	2823	2201	4281	1021	1559			2314	2314
04/01-03/31	13																	
12/01-03/31	61																	
04/01-11/30	24																	
04/01-03/31	36																	
04/01-10/31	1459	190	1435	180	2652	310	1459	1780	1459	1780	1435	2288	825	1330			1459	1459
12/01-03/31	6																	
04/01-03/31	9																	
04/01-11/30	1																	
04/01-03/31	19																	
12/01-03/31	29																	
04/01-03/31	48																	
04/01-11/30	22																	
05/01-06/15	411	298	395	258	706	499	411	501	411	501	395	725	283	437			411	411
07/15-10/25																		
05/01-10/31																		
12/01-03/31	6																	
04/01-11/30	1																	
04/01-03/31	2																	
12/01-03/31	6																	
04/01-11/30	3																	
04/01-03/31	10																	
07/01-10/19	273		250		476		273	333	273	333	250	560	258	383			273	273
06/22-08/21																		
08/22-10/21																		
04/01-03/31	2																	
04/01-03/31	7																	

VALLEY RESOURCE AREA PROPOSED ANHPs IN ALTERNATIVE 3 CONTINUED

ALLOT. NO.	ALIGNMENT NAME	MGT STS	ACRES		PROFITABLE		GOOD		RANGE CONDITION		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4116	Hawk Coulee	P	5278.5	2442.5	42.0	0	3092.7	1209.3	1736.5	1157.1	0	0	407.3	76.1	67 6 1 3 11	CA AN AN AN DM
4126	Dry West	P	399.0	144.6	5.2	0	0	15.8	391.4	128.8	0	0	2.4	0	60 5 1 1 1	CA AN AN AN DM
4302	Bear Creek	P	14789.0	3106.3	0	0	8620.6	1615.8	5921.6	1437.3	0	0	246.8	53.2	625 595 295 5 65 10 32	CA CA CA BD CA AN DM
4303	Buggy Creek	P	14960.6	18080.2	37.6	92.8	8297.0	12536.1	6377.6	5345.2	0	0	248.4	106.1	1150 488 518 488 350 900 635 575 635 545 840 25 55 4 6 104 31 6	Y Y Y Y Y CA CA CA CA CA CA BD AN AN AN DM DM DM
4503	Middle Coon Coulee	P	186.3	497.1	0	0	0	85.9	186.3	411.2	0	0	0	0	4 1 1 3	CA AN DM DM
4535	South Fork - Antelope Creek	P	8875.3	1390.9	0	0	267.2	0	8389.1	1354.6	0	0	219.0	36.3	40 58 80 90 13 19	CA CA CA CA AN DM
4537	Lower North Fork Antelope Creek	P	2156.1	208.4	0	0	198.5	28.5	1894.8	170.5	0	0	62.8	9.4	84 3 5	CA AN DM
4539	Hardscrabble Creek	P	2005.8	1127.1	0	0	130.8	61.0	1843.4	1055.0	0	0	31.6	11.1	200 3 6	CA AN DM
4540	Hay Coulee	P	3172.3	2871.4	0	0	33.7	101.2	3069.5	2711.0	0	0	69.1	59.2	5 190 99 190 5 12	BD CA CA CA AN DM
4546	Lost Coulee	P	11237.3	2795.4	0	0	5237.3	1575.3	5028.2	1025.6	0	0	971.8	194.5	360 14 16 28 39 17	CA CA AN DM DM DM
4550	South Shed Coulee	P	13602.5	2313.1	20.0	22.0	9954.8	1617.9	3281.2	623.6	0	0	346.5	49.6	373 19 14 97 42	CA AN DM DM DM
4551	Upper Brazil Creek	P	27250.8	1892.5	0	0	5881.1	225.7	20304.7	1636.5	0	0	1065.0	30.3	24 472 41 23 37 53	CA CA CA CA AN DM

SEASON OF USE	CURRENT BLM	AUMS OTHER	REC. STOCKING		POTEN. FORAGE		ALTERNATIVE A ENHANC. COMBINED VEG. DESP.		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED 1ST. FORAGE		ALTERNATIVE D ENHANCED WATERWILL/LIFE		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
			RATS/AUMS		PRODUCTS		ST		ST		ST		ST		ST		ST	
			BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/29	739		938	466	1439	758	739	902	739	902	938	1307	491	627			739	739
12/0-03/31	3																	
04/01-11/30	1																	
04/01-03/31	5																	
04/01-03/31	26																	
07/01-08/29	88	34	72	36	143	68	88	170	88	170	72	182	88	170			88	88
12/0-03/31	3																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
05/15-09/01	3091	509	3033	629	4717	999	3091	3771	3091	3771	3033	5395	2267	2683			3091	3091
09/02-10/31																		
11/01-11/15																		
06/15-11/15																		
04/29-06/01																		
04/01-03/31	16																	
04/01-03/31	79																	
04/15-04/30																		
05/01-06/25	2843	3903	3171	4303	4978	6447	2843	3468	2843	3468	3171	5611	1869	2345			2843	2843
06/26-09/01																		
09/02-09/25																		
09/26-11/15																		
04/15-05/15																		
05/16-06/25																		
06/26-09/01																		
09/02-11/01																		
11/02-11/15																		
11/16-11/25																		
05/15-11/15																		
12/01-03/31	29																	
04/01-11/30	4																	
04/01-03/31	9																	
12/01-03/31	83																	
04/01-11/30	50																	
04/01-03/31	14																	
03/01-02/28	50		34	101	67	187	50	76	50	76	34	67	49	66			50	50
04/01-03/31	2																	
04/01-11/30	2																	
12/01-03/31	2																	
03/01-10/31	1373	235	1316	215	2571	430	1373	1675	1373	1675	1316	2245	920	1424			1373	1373
05/01-10/31																		
05/01-10/31																		
05/01-10/31																		
04/01-03/31	20																	
04/01-03/31	46																	
06/01-10/31	420		339	33	635	62	420	512	420	512	339	370	336	437			420	420
04/01-03/31	5																	
04/01-03/31	12																	
07/01-10/15	459	211	353	191	676	370	459	560	459	560	353	652	459	608			459	459
04/01-03/31	5																	
04/01-03/31	14																	
03/01-02/28	365	556	498	457	990	892	365	689	365	689	498	929	359	589			365	365
05/01-06/20																		
06/21-07/18																		
07/19-11/01																		
04/01-03/31	8																	
04/01-03/31	29																	
04/16-10/22	1865	423	1996	533	3169	809	1865	2275	1865	2275	1996	3134	1137	1406			1865	1865
07/01-10/22																		
04/01-03/31	25																	
04/01-03/31	67																	
12/01-03/31	31																	
04/01-11/30	27																	
04/01-10/31	2289	321	2946	528	4297	776	2289	2793	2289	2793	2946	5043	1304	1569			2289	2289
04/01-03/31	30																	
04/01-03/31	34																	
12/01-03/31	78																	
04/01-11/30	67																	
05/01-10/31	3018	344	3999	279	7227	529	3018	3682	3018	3682	3999	7719	2037	4090			3018	3018
05/01-10/31																		
05/01-10/31																		
05/01-10/31																		
04/01-03/31	58																	
04/01-03/31	127																	

VALLEY RESOURCE AREA PROPOSED AMPs IN ALTERNATIVE B CONTINUED (Also proposed in A, C and D)

ALLOT. NO.	ALLOTMENT NAME	MCT SYS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4553	Brasil Creek	P	22437.3	4192.2	0	0	7597.0	281.2	14291.3	3667.3	0	0	349.0	42.7	15 1 140 86 111 57 8 300 90 3 37 64	C C C C C C C C C C AN DM
4554	Lower South Fork Antelope	P	3415.7	239.1	0	0	749.4	40.1	1623.3	194.7	0	0	42.8	4.3	104 5 7	C AN DM
4557	Second Brasil Creek	P	3061.2	1435.3	0	0	64.3	30.2	2973.9	1393.1	0	0	22.8	12.2	300 300 4 18	C C AN DM
4573	Little Beaver Creek	P	7876.5	640.0	0	0	2697.6	52.0	4912.1	358.6	0	0	286.8	29.4	140 12 17	C AN DM
4703	Upper Rock Coulee	P	3242.8	1009.8	0	0	763.3	244.6	2474.3	765.2	0	0	5.2	0	140 10 2 5	C H AN DM
4707	East Fork Crow Creek	P	13774.8	2748.4	0	0	4896.0	304.7	8283.5	2434.4	0	0	595.3	9.3	80 20 200 400 8 27	Y C C C AN DM
4711	North Willow Creek	P	11006.3	2397.3	0	76.0	4430.7	2677.7	6121.2	822.8	0	0	454.6	20.8	113 95 102 94 97 30 88 38 2 5 2	C C C C C C C AN AN AN DM
4722	Bitter Creek	P	5019.7	9233.1	0	39.8	1932.7	3674.4	2753.2	5487.3	24.7	0	309.1	31.6	36 40 9 1 2 27 10 4	CA CA AN AN AN DM DM DM
4724	Lower Rock Creek	P	2069.7	1332.3	0	0	594.8	466.3	1446.1	742.3	26.8	123.2	2.0	0.3	33 1 1 16 6 2	CA AN AN AN DM DM DM
SUB TOTALS			237699	82939	858	406	90048	34751	134015	46083	245	123	12333	1576		

SEASON OF USE	CURRENT ADMS		REC. STOCKING RATE/ADMS		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED VEG. USES		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATERMILL/DIPE		ALTERNATIVE E NO LIVESTOCK CRATING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
05/16-11/15	3503	761	3630	625	6202	1212	3503	4274	3503	4274	3630	5604	2686	3690			3503	3503
06/10-10/09																		
05/01-10/31																		
05/01-10/31																		
03/01-11/15																		
02/18-10/15																		
10/16-11/15																		
07/01-10/31																		
05/01-10/15																		
06/08-09/01																		
04/01-03/31		58																
04/01-03/31		154																
05/16-10/15																		
04/01-03/31		8	39	598	41	1079	76	483	589	483	589	598	862	338	498		483	483
04/01-03/31		17																
05/01-06/31	665	235	501	235	994	466	665	811	665	811	501	967	228	475			665	665
11/01-11/30		6																
04/01-03/31		43																
04/20-10/19			705	137	1168	82	1987	160	705	860	705	860	1168	1528	427	620	705	705
04/01-03/31		19																
04/01-03/31		41																
05/01-09/30	661	112	655	206	1167	367	661	806	661	806	655	1209	410	729			661	661
05/01-11/15																		
04/01-03/31		3																
04/01-03/31		12																
04/20-10/31	1981	534	2395	479	4099	911	1981	2417	1981	2417	2395	4195	1422	2530			1981	1981
06/10-10/30																		
04/10-07/15																		
07/16-11/01																		
04/01-03/31		13																
04/01-03/31		65																
05/20-10/09	2209	602	2158	616	3544	903	2209	3314	2209	3314	2158	4004	1653	2062			2209	2209
05/22-10/09																		
06/01-10/09																		
06/07-10/09																		
06/11-10/09																		
06/20-10/09																		
05/01-10/31																		
12/01-03/31		20																
04/01-11/30		2																
04/01-03/31		8																
04/01-03/31		53																
03/01-02/28	439	476	952	1955	1600	3238	439	1008	439	1008	952	1687	135	511			439	439
03/01-02/28																		
12/01-03/31		5																
04/01-11/30		1																
04/01-03/31		2																
12/01-03/31		22																
04/01-03/31		16																
04/01-03/31		10																
03/01-02/28			451	295	793	529	392	478	392	478	451	840	252	449			392	392
12/01-03/31		5																
04/01-11/30		1																
04/01-03/31		2																
12/01-03/31		13																
04/01-11/30		10																
04/01-03/31		5																
41142	12611	45211	16695	75656	27373	41142	51753	41142	51753	45211	79467	28772	41807				41142	41142

VALLEY RESOURCE AREA EXISTING AMPs

ALLOT. NO.	ALLOTMENT NAME	HGT STS	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4000	Upper Crow Creek	E	4501.8	1125.8	62.0	0	1470.4	425.3	2965.9	700.3	0	0	8.3	0	203	DM
															3	AN
															9	DM
4002	Upper Bluff Creek	E	3097.2	1870.2	26.9	0	1728.8	943.0	1309.4	925.2	0	0	32.1	2.0	175	CA
															2	AN
															6	DM
4003	Upper E. Fork Crow	E	3604.3	384.3	0	0	2072.6	71.6	3336.3	301.9	0	0	195.4	10.8	299	CA
															3	AN
															11	DM
4008	W. Fork Bluff Creek	E	4052.9	3378.2	0	0	696.9	515.0	3221.2	2836.6	76.8	0	58.0	26.6	225	CA
															3	AN
															8	DM
4022	Lower Bluff Creek	E	4494.4	1358.6	0	0	2848.4	988.4	1645.2	370.2	0	0	0.8	0	150	CA
															300	CA
															63	CA
															250	CA
															3	AN
															11	DM
4041	Anderson-Ojuel	E	17216.7	8747.4	1083.8	0	6015.0	4582.7	8912.3	3896.1	0	0	1205.6	268.6	1032	Y
															300	CA
															10	AN
															39	DM
4053	E. Fork Willow Creek	E	15645.5	4002.1	0	0	1527.9	534.5	12559.4	3310.5	0	0	1558.2	157.1	48	CA
															650	CA
															7	AN
															51	AN
															2	AN
															23	DM
															23	DM
															70	DM
4078	Upper Lime Creek	E	3143.1	191.3	0	0	2640.8	162.1	410.3	28.0	0	0	92.0	1.2	108	CA
															2	AN
															11	DM
4301	Upper Buggy Creek	E	8168.1	9379.1	0	108.9	4951.4	8681.4	2945.5	552.9	0	0	271.2	35.9	750	SB
															650	CA
															100	CA
															650	CA
															7	AN
															5	AN
															44	AN
															16	DM
															14	DM
															7	DM
4525	Coon Coulee	E	2146.1	342.2	0	0	606.1	140.7	1540.0	201.5	0	0	0	0	107	CA
															3	AN
															9	DM
4548	Boxelder Creek	E	12717.1	53.4	0	0	5878.4	40.6	6223.1	12.8	0	0	615.6	0	128	Y
															225	CA
															19	AN
															45	DM
															19	DM
															8	DM
4563	Coyote Creek	E	6287.8	2368.3	0	0	3825.9	1291.7	2327.9	945.7	36.9	90.0	97.1	40.9	38	CA
															137	CA
															70	CA
															9	AN
															12	DM
4571	Grant Coulee	E	15214.5	1988.4	0	0	5643.9	15.7	9188.6	1947.3	0	0	382.0	25.4	92	CA
															262	CA
															22	AN
															38	DM
4574	Miller Coulee	E	22894.7	658.4	0	0	1929.2	0	20017.6	638.3	144.9	0	803.0	20.1	72	CA
															122	CA
															70	CA
															105	CA
															31	AN
															45	DM
4516	Lower Willow Creek	E	5312.6	1029.7	0	0	1384.5	509.3	3587.1	353.5	0	0	341.0	164.9	150	CA
															8	AN
															32	DM
4700	Upper McEachran Coulee	E	5725.3	4676.7	0	0	2789.0	2475.7	2903.4	2182.7	0	0	32.9	18.3	372	CA
															3	DM
															10	DM

VALLEY RESOURCE AREA EXISTING ANP's CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MUT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		CRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4701	Devision Coulee	E	5295.5	1294.2	0	0	2202.2	476.3	3022.9	814.3	0	0	70.4	3.6	347	AN
															3	AN
															11	DM
4708	Ichpair Creek	E	10894.6	3020.7	0	0	7803.8	1960.3	3068.5	1060.0	0	0	22.3	0.4	648	Y
															16	AN
															1	AN
															6	AN
															23	DM
4713	Lower Crow Creek	E	3413.7	751.3	0	0	1265.5	340.7	2139.4	410.6	0	0	8.8	0	105	CA
															45	CA
															2	AN
															3	DM
															1	DM
															1	DM
4715	E. Rock Creek	E	1912.8	1672.5	0	40.6	927.1	845.6	922.9	707.9	0	0	62.8	78.4	105	Y
															12	AN
															1	AN
															1	AN
															4	DM
4716	James Coulee	E	3670.8	458.1	344.8	37.8	2596.5	370.3	729.5	50.0	0	0	0	0	60	CA
															120	CA
															5	CA
															31	AN
															1	AN
															1	AN
															7	DM
4718	Upper Willow Creel	E	26222.5	8436.8	104.7	129.7	10779.8	4349.6	13070.1	3735.3	140.7	0	2127.2	222.2	400	CA
															800	CA
															1200	CA
															71	AN
															3	AN
															13	AN
															123	DM
															41	DM
															55	DM
4723	Little Papoose Creek	E	8865.9	4528.0	650.9	324.6	4049.5	2196.4	3839.2	1960.1	10.0	0	316.3	46.9	254	CA
															81	CA
															11	CA
															6	AN
															84	DM
															31	DM
															11	DM
4726	Eagles Nest Coulee	E	18073.9	2933.0	80.0	15.6	10457.6	2074.3	6457.0	788.7	76.9	4.9	1002.4	49.5	482	CA
															70	AN
															3	AN
															8	AN
															190	DM
															70	DM
															11	DM
SUB TOTAL			214572	64649	2353	657	86091	33991	116338	28733	486	95	9304	1173		

SEASON OF USE	CURRENT BLM	AUMs OTHER	REG. STOCKING		POTEN. FORAGE		ALTERNATIVE A PMAS, COMBINED PROD. USES		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED LIVST. FORAGE		ALTERNATIVE D ENHANCED WATERBUTTLIFE		ALTERNATIVE E NO LIVESTOCK GRASSING		ALTERNATIVE F NO ACTION	
			RATE/AUMs		PRODUCTION		ST		ST		ST		ST		ST		ST	
			BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/20-09/10	1187	70	1051	259	1752	434	1187	1448	1187	1448	1051	2003	741	1171			1187	1187
04/04-03/31	5																	
04/01-03/31	26																	
04/15-10/31	2350	613	2836	723	4153	1094	2350	2867	2350	2867	2836	5126	1443	2423			2350	2350
12/01-03/31	8																	
04/01-11/30	1																	
04/01-03/31	9																	
04/01-03/31	55																	
05/01-11/03	641	263	760	178	1278	290	641	704	641	704	760	1414	430	630			641	641
03/01-11/04																		
04/01-03/31	3																	
12/01-03/31	2																	
04/01-11/30	2																	
04/01-03/31	17																	
04/15-11/15	264	179	372	312	592	479	264	322	264	322	372	621	104	214			264	264
12/01-03/31	6																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	10																	
04/01-04/15	739	37	973	134	1354	181	739	902	739	902	973	1609	403	494			739	739
04/16-10/17																		
07/01-10/17																		
12/01-03/31	16																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	17																	
05/15-05/30	3944	1553	4734	1775	7690	2078	3944	5217	3944	5217	4734	8348	3070	3910			3944	3944
03/31-06/15																		
06/16-10/17																		
12/01-03/31	37																	
04/01-11/30	3																	
04/01-03/31	20																	
12/01-03/31	98																	
04/01-01/31	66																	
04/01-03/31	132																	
04/01-11/15	1626	857	1931	1048	2946	158	1626	1984	1626	1984	1931	3245	998	1720			1626	1626
05/01-11/15																		
06/15-09/15																		
04/01-03/31	9																	
12/01-03/31	67																	
04/01-11/30	50																	
04/01-03/31	26																	
05/01-11/30	2823	550	3725	663	5699	977	2823	3444	2823	3444	3225	6514	1822	3254			2823	2823
12/01-03/31	37																	
04/01-11/30	3																	
04/01-03/31	13																	
12/01-03/31	152																	
04/01-11/30	112																	
04/01-03/31	26																	
34022	11321	40130	13845	65293	19537	34022	43114	34022	43114	40782	70195	22569	33527				34022	34022

VALLEY RESOURCE AREA RWS-AHFs

ALLOT. NO.	ALLOTMENT NAME	MOT SYS N	ACRES		EXCELLENT		GOOD		FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
			45.8	0	0	0	45.8	0	0	0	0	0	0	0		
4004																1 C 1 AN 1 DM
4007		N	61.6	813.8	0	0	4.9	0	56.7	813.8	0	0	0	0	1 C 1 AN 1 DM	
4017	Morgan Creek	N	414.5	1735.8	0	0	414.5	1674.6	0	48.9	0	0	0	12.3	2 C 1 AN 1 DM	
4018	Upper South Creek	N	1504.2	1888.3	0	0	1410.3	1298.5	86.5	576.0	0	0	7.4	13.8	27 C 1 AN 3 DM	
4027		N	154.3	1100.5	0	0	47.9	691.5	106.4	395.9	0	0	0	13.1	2 C 1 AN 1 DM	
4028		N	199.8	137.8	0	0	4.9	16.0	194.9	121.8	0	0	0	0	12 C 1 AN 1 DM	
4033		N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	1 C 1 AN 1 DM	
4034		N	464.0	169.8	0	0	179.5	117.0	283.7	57.8	0	0	0.8	0	12 C 12 C 1 AN 1 DM	
4036		N	39.6	993.7	0	126.9	0	181.3	39.6	685.5	0	0	0	0	2 C 1 AN 1 DM	
4042		N	490.4	703.5	0	0	473.2	349.0	13.8	351.7	0	0	3.4	2.8	8 C 1 AN 1 DM	
4043	Shaw Coulee	N	58.8	161.9	0	0	46.6	161.9	9.5	0	0	0	2.7	0	1 C 1 AN 1 DM	
4047	Upper West Fork Cache	N	345.0	411.4	0	0	0	0	345.0	411.4	0	0	0	0	4 C 1 AN 1 DM	
4051		N	119.8	0	0	0	108.9	0	10.9	0	0	0	0	0	2 C 1 AN 1 DM	
4057		N	159.3	420.3	89.6	258.8	69.7	161.5	0	0	0	0	0	0	4 C 1 AN 1 DM	
4062		N	1056.5	443.4	0	0	360.9	55.0	686.7	388.4	8.9	0	0	0	17 C 1 AN 2 DM	
4063		N	116.8	393.0	0	0	74.0	68.7	42.8	324.3	0	0	0	0	50 C 1 AN 1 DM	
4064		N	151.8	0	0	0	159.8	0	0	0	0	0	0	0	7 C 1 AN 1 DM	
4065		N	371.5	1841.0	0	0	14.9	983.3	356.6	857.7	0	0	0	0	7 C 1 AN 1 DM	
4070		N	487.0	164.0	0	0	194.0	164.0	293.0	0	0	0	0	0	12 C 1 AN 1 AN 1 DM	
4073		N	66.7	6.0	0	0	39.8	0	26.9	6.0	0	0	0	0	1 C 1 AN 1 DM	
4075		N	433.9	542.0	0	20	297.3	469.0	136.6	53.0	0	0	0	0	6 C 1 AN 1 DM	
4076		N	194.9	0	124.0	0	70.9	0	0	0	0	0	0	0	3 C 1 AN 1 DM	

SEASON OF USE	CURRENT AIMS	REC. STOCKING RATE/AIMS	TOTN. FORAGE PRODUCTION	ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
				ENHANC. COMBINED VEG. USES		CONT. OF PRESENT MONT.		ENHANCED LIVST. FORAGE		ENHANCED WATERMILL/LIFE		ENHANCED NO LIVESTOCK GRAZING		NO ACTION	
				ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	10	11	15	10	10	10	10	11	11	10	10			10	10
04/01-03/31	2														
04/01-03/31	2														
04/01-10/31	7	10	142	18	284	7	7	7	7	10	10	7	7	7	7
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	28	109	453	146	614	28	28	28	28	109	109	28	28	28	28
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	254	378	437	519	650	254	254	254	254	378	378	254	254	254	254
04/01-03/31	2														
04/01-03/31	7														
03/01-02/28	15	32	236	55	356	15	15	15	15	32	32	15	15	15	15
04/01-03/31	2														
04/01-03/31	2														
04/01-07/20	44	35	28	69	52	44	44	44	44	35	35	44	44	44	44
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	7	11	14			7	7	7	7	11	11	7	7	7	7
04/01-03/31	2														
04/01-03/31	2														
03/01-04/05	64	106	56	174	81	64	64	64	64	106	106	64	64	64	64
11/01-02/28	2														
04/01-03/31	2														
04/01-03/31	2														
06/01-10/01	7	8	245	15	396	7	7	7	7	8	8	7	7	7	7
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	99	115	142	157	229	99	99	99	99	115	115	99	99	99	99
04/01-03/31	2														
04/01-03/31	2														
04/01-12/31	9	11	38	16	51	9	9	9	9	11	11	9	9	9	9
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	64	64	75	128	150	64	64	64	64	64	64	64	64	64	64
04/01-03/31	2														
04/01-03/31	5														
03/01-02/28	22	33	45			22	22	22	22	33	33	22	22	22	22
04/01-03/31	2														
04/01-03/31	2														
04/01-02/28	52	46	133	51	148	52	52	52	52	46	46	52	52	52	52
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	208	230	86	393	163	208	208	208	208	230	230	208	208	208	208
04/01-03/31	2														
04/01-03/31	2														
05/01-09/10	23	226	29	77	45	141	23	23	23	23	29	23	23	23	23
04/01-03/31	2														
04/01-03/31	2														
05/01-07/30	36	41	55			36	36	36	36	41	41	36	36	36	36
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	87	73	450	142	712	87	87	87	87	73	73	87	87	87	87
04/01-03/31	2														
04/01-03/31	2														
04/01-12/31	112	104	48	175	64	112	112	112	112	104	104	112	112	112	112
12/01-03/31	1														
04/01-11/30	1														
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	14	16	1	24	2	14	14	14	14	16	16	14	14	14	14
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	76	106	150	159	204	76	76	76	76	106	106	76	76	76	76
04/01-03/31	2														
04/01-03/31	2														
03/01-02/28	34	64	71			34	34	34	34	64	64	34	34	34	34
04/01-03/31	2														
04/01-03/31	2														

VALLEY RESOURCE AREA NON-AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS N	ACRES		EXCELLENT		GOOD		RANGE CONDITION		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
			475.1	0	4.0	0	409.7	0	36.7	0	0	0	4.7	0	8	C
4077															1	AN
															1	DM
4081		N	86.0	0	0	0	82.0	0	4.0	0	0	0	0	0	4	BD
															1	AN
															1	DM
4084		N	315.6	998.1	0	0	241.2	210.3	71.3	783.1	0	0	3.1	4.7	2	C
															2	AN
															1	DM
4086	VIP Tract	N	584.5	90.4	0	0	6.0	65.8	465.6	24.3	112.7	0	0.2	0.3	35	C
															1	AN
															1	DM
4087	Lower Lime Creek	N	199.7	718.0	0	0	82.9	95.3	116.8	622.5	0	0	0	0	3	C
															1	AN
															1	DM
4088	Elsworth Coulee	N	1278.7	1275.0	0	0	368.3	485.9	908.0	786.4	0	0	2.4	2.7	19	C
															1	AN
															3	DM
4090	Lower Alkali Creek	N	319.7	0	0	0	267.9	0	51.8	0	0	0	0	0	4	C
															1	AN
															1	DM
4093		N	340.0	299.6	0	0	204.8	131.4	126.6	163.8	0	0	8.6	4.4	42	C
															1	AN
															1	AN
															1	DM
4095		N	159.8	136.5	0	0	126.9	119.5	32.9	17.0	0	0	0	0	2	C
															1	AN
															1	DM
4096		N	320.0	392.7	0	0	0	0	320.0	392.7	0	0	0	0	25	C
															1	AN
															1	DM
4097	East Fork Ganche Coulee	N	582.0	1039.4	0	0	409.0	505.5	172.4	526.3	0	0	0.6	7.6	8	C
															1	AN
															1	DM
4103		N	418.9	0	0	0	0	0	329.0	0	89.9	0	0	0	36	C
															1	AN
															1	DM
4104		N	399.0	0	0	0	175.8	0	143.3	0	79.9	0	0	0	16	C
															3	AN
															1	AN
															1	AN
															1	DM
4107		N	85.3	408.2	0	0	19.6	210.8	57.6	187.1	0	0	8.1	10.3	2	C
															1	AN
															1	AN
															1	AN
															1	DM
															1	DM
4108	Upper Martin Coulee	N	495.3	48.0	0	0	71.9	21.0	423.6	27.0	0	0	0	0	25	C
															4	AN
															1	AN
															1	AN
															1	DM
4110	Upper School Section	N	218.0	491.6	0	0	204.5	396.8	8.0	89.0	0	0	5.5	5.8	8	C
															8	C
															1	AN
															1	AN
															1	AN
															1	DM
															1	DM
4114	Lower Spring Coulee	N	85.5	159.0	0	0	78.1	113.0	6.0	44.8	0	0	1.4	1.2	3	C
															1	AN
															1	DM
4115		N	453.1	6.0	0	0	300.8	2.0	144.4	4.0	0	0	7.9	0	25	C
															1	AN
															1	DM
4118	Mooney Coulee	N	377.2	119.7	0	0	129.6	0	247.6	119.7	0	0	0	0	5	C
															1	AN
															1	AN
															1	DM

SEASON OF USE	CURRENT AIMS		REC. STOCKING RATE/AIMS		POTEN. FORAGE PRODUCTION		ALTERNATIVE A ENHANC. COMBINED VEG. USES		ALTERNATIVE B COMB. OF PERCENT MONT.		ALTERNATIVE C ENHANCED INVT. FORAGE		ALTERNATIVE D ENHANCED WATER/SLURRIES		ALTERNATIVE E NO LIVESTOCK GRAZING		ALTERNATIVE F NO ACTION	
	BLM	OTHER	BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
03/01-02/28	94		118		165		94	94	94	94	118	118	94	94			94	94
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	16	35	23		31		16	16	16	16	23	23	16	16			16	16
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	26		71	192	103	352	26	26	26	26	71	71	26	26			26	26
04/01-03/31	3																	
04/01-03/31	2																	
05/01-04/05	111		90	21	198	31	111	111	111	111	90	90	111	111			111	111
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	33		48	166	81	309	33	33	33	33	48	48	33	33			33	33
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	234		267	276	469	469	234	234	234	234	267	267	234	234			234	234
04/01-03/31	2																	
04/03-03/31	7																	
03/01-02/28	55		91		128		55	55	55	55	91	91	55	55			55	55
04/01-03/31	2																	
04/01-03/31	2																	
05/05-11/05	71	178	65	57	101	95	71	71	71	71	65	65	71	71			71	71
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	24		43	40	61	55	24	24	24	24	43	43	24	24			24	24
04/01-03/31	2																	
04/01-03/31	2																	
06/01-11/10	55	75	67	76	123	151	55	55	55	55	62	62	55	55			55	55
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	99		139	211	207	336	99	99	99	99	139	139	99	99			99	99
04/01-03/31	2																	
04-01-03 31	2																	
06/01-08/30	110		73		161		110	110	110	110	73	73	110	110			110	110
04/01-03/31	2																	
04/01-03/31	2																	
05/01-10/31	96		76		136		96	96	96	96	76	76	96	96			96	96
12/01-03/31	2																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	20		14	94	26	148	20	20	20	20	14	14	20	20			20	20
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
12/01-03/31	1																	
04/01-11/30	2																	
04/01-03/31	2																	
05/01-09/01	100		96	12	180	22	100	100	100	100	96	96	100	100			100	100
12/01-03/31	2																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
03/01-05/15	48		46	113	63	161	48	48	48	48	46	46	48	48			48	48
11/15-12/08	1																	
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
12/01-03/31	1																	
04/01-11/30	2																	
04/01-03/31	2																	
07/01-12/31	18		21	39	29	58	18	18	18	18	21	21	18	18			18	18
04/01-03/31	2																	
04/01-03/31	2																	
05/15-10/07	119		104	1	158	2	119	119	119	119	104	104	119	119			119	119
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	58		85	22	145	45	58	58	58	58	85	85	58	58			58	58
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	1																	
04/01-03/31	1																	

VALLEY RESOURCE AREA NON-AMPA CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT SYS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CES
4119	Lower Mooney Coulee	N	211.7	177.8	0	0	69.8	0	73.9	177.8	68.0	0	0	0	7	C
															1	AN
															1	DM
4120	Richardson Coulee	N	159.6	0	0	0	111.9	0	47.7	0	0	0	0	0	3	C
															1	AN
															1	DM
4122	Lower Foss Coulee	N	256.6	0	0	0	173.8	0	82.8	0	0	0	0	0	3	C
															1	AN
															1	AN
															1	DM
4124	East Cherry Creek	N	740.0	887.9	0	0	32.8	0	707.2	887.9	0	0	0	0	14	C
															1	AN
															1	DM
4127		N	79.8	412.0	0	0	79.8	380.4	0	31.6	0	0	0	0	3	C
															1	AN
															1	DM
4201		N	37.8	0	0	0	36.6	0	0	0	0	0	1.2	0	1	C
															1	AN
															1	DM
4202	Lenz Coulee	N	191.3	0	0	0	130.7	0	57.1	0	0	0	3.5	0	1	C
															2	AN
															1	AN
															1	DM
4204	Tiger Butte	N	315.8	0	0	0	6.0	0	203.0	0	0	0	106.8	0	5	C
															1	AN
															1	DM
4205	Butch Coulee	N	160.0	0	0	0	160.0	0	0	0	0	0	0	0	10	C
															1	AN
															1	DM
4206	Road Creek	N	80.0	0	0	0	0	0	80.0	0	0	0	0	0 Not Allocated	1	AN
															1	DM
4207	Lower Milk River	N	132.7	0	93.1	0	38.5	0	0	0	0	0	1.1	0	2	C
															1	AN
															1	DM
4208	Wheeler Coulee	N	401.6	0	131.7	0	264.0	0	0	0	0	0	5.9	0	15	C
															14	C
															1	AN
															1	DM
4300	Dry Fork	N	1414.7	0	0	0	867.5	0	547.2	0	0	0	0	0	662	C
															1	AN
															3	DM
4304	Porcupine Creek	N	3299.9	3167.3	0	0	2363.0	2975.3	827.9	154.4	25.3	24.0	83.7	13.6	208	C
															600	C
															500	C
															100	C
															1278	C
															10	AN
															1	AN
															2	AN
															7	DM
4305		N	323.4	0	0	0	190.7	0	128.6	0	0	0	4.1	0	48	C
															96	C
															144	C
															192	C
															216	C
															8	C
															1	AN
															1	DM
4306		N	80.0	0	0	0	80.0	0	0	0	0	0	0	0	1	C
															1	AN
															1	DM
4307	Lower Spring Creek	N	239.4	97.8	6.9	0.9	218.7	46.3	13.8	49.5	0	0	0	1.1	5	C
															2	AN
															1	AN
															1	DM
															1	DM
															1	DM
4310	Upper Cherry Creek	N	143.7	0	46.9	0	70.9	0	27.9	0	0	0	0	0	58	C
															1	AN
															1	DM

SEASON OF USE	CURRENT BLM	AUMS OTHER	REG. STOCKING		POTEN. FORAGE		ALTERNATIVE A EXHA. CORNED		ALTERNATIVE B CONT. OF		ALTERNATIVE C ENHANCED		ALTERNATIVE D ENHANCED		ALTERNATIVE E NO LIVESTOCK		ALTERNATIVE F NO ACTION	
			RATE/AUMS		PRODUCTION		VEG. USRS		PRESENT MONT.		LVST. FORAGE		WATER/AUMS		GRAZING			
			BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
04/01-09/15	38		41	33	81	67	38	38	38	38	41	41	38	38			38	38
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	38		40		59		38	38	38	38	40	40	38	38			38	38
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	41		62		94		41	41	41	41	62	62	41	41			41	41
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
04/01-03/31	2																	
03/01-11/30	108		134	155	263	310	108	108	108	108	134	134	108	108			108	108
04/01-03/31	2																	
04/01-03/31	5																	
05/01-09/15	16		20	109	27	150	16	16	16	16	20	20	16	16			16	16
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	6		8		11		6	6	6	6	8	8	6	6			6	6
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
03/01-02/28	15		37		55		15	15	15	15	37	37	15	15			15	15
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
04/15-11/15	30		27		53		30	30	30	30	27	27	30	30			30	30
04/01-03/31	2																	
04/01-03/31	2																	
05/01-08/31	39		48		64		39	39	39	39	48	48	39	39			39	39
04/01-03/31	2																	
04/01-03/31	2																	
Invest Grazing	24		13		26		24	24	24	24	13	13	24	24			24	24
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	28		50		53		28	28	28	28	50	50	28	28			28	28
04/01-03/31	2																	
04/01-03/31	2																	
06/01-08/31	73		85		109		73	73	73	73	85	85	73	73			73	73
09/01-10/31																		
04/01-03/31	2																	
04/01-03/31	2																	
05/01-09/15	309	2671	321		492		309	309	309	309	321	321	309	309			309	309
04/01-03/31	2																	
04/01-03/31	7																	
03/01-02/28	671	12609	713	810	1559	1111	671	671	671	671	713	713	671	671			671	671
04/16-06/30																		
05/01-10/15																		
05/01-11/15																		
10/16-11/07																		
12/01-03/31	5																	
04/01-11/30	1																	
04/01-03/31	3																	
04/01-03/31	17																	
05/01-05/02	69	1133	71		112		69	69	69	69	71	71	69	69			69	69
05/02-05/03																		
05/03-05/04																		
05/04-05/05																		
05/05-10/10																		
05/08-07/15																		
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	16		19		26		16	16	16	16	19	19	16	16			16	16
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	63		122	21	165	33	63	63	63	63	122	122	63	63			63	63
12/01-03/31	1																	
04/01-11/30	1																	
04/01-03/31	2																	
12/01-03/31	1																	
04/01-11/30	2																	
04/01-03/31	2																	
05/01-11/31	31	316	35		45		31	31	31	31	35	35	31	31			31	31
04/01-03/31	2																	
04/01-03/31	2																	

VALLEY RESOURCE AREA NON-AMPS CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MGT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
			399.0	620.2	0	0	19.0	88.2	337.9	527.4	0	0	2.1	4.6		
4311		N													14	C
															1	AN
															1	AN
															1	AS
															1	DM
4500		N	39.9	0	39.9	0	0	0	0	0	0	0	0	0	1	C
															1	AN
															1	DM
4501	Miles Crossing Coulee	N	331.7	397.4	0	0	331.7	384.5	0	12.9	0	0	0	0	8	C
															1	AN
															1	DM
4502	Lower Miles Crossing	N	121.5	0	0	0	39.0	0	82.5	0	0	0	0	0	2	C
															1	AN
															1	DM
4504		N	150.9	0	0	0	120.3	0	0	0	0	0	30.6	0	2	C
															1	AN
															1	DM
4505	Shaw Coulee	N	494.8	0	0	0	289.0	0	174.9	0	0	0	30.9	0	70	C
															1	AN
															3	DM
4506	Jernigan Coulee	N	507.3	0	0	0	256.3	0	172.0	0	0	0	79.0	0	8	C
															1	AN
															3	DM
4507	Horse Coulee	N	333.8	0	2.9	0	54.8	0	254.5	0	0	0	21.6	0	3	C
															1	AN
															2	DM
4508	Little Horn Coulee	N	601.0	0	0	0	267.6	0	317.7	0	0	0	15.7	0	5	C
															1	AN
															1	DM
4509	Tank Coulee	N	1333.3	0	0	0	946.3	0	387.0	0	0	0	0	0	24	C
															2	AS
															5	DM
4517	Westfork Ash Coulee	N	593.0	0	101.6	0	491.4	0	0	0	0	0	0	0	10	C
															1	AN
															1	DM
4520	McGregor Coulee	N	116.5	0	0	0	111.6	0	4.0	0	0	0	0.9	0	4	C
															1	AN
															1	DM
4522	Buffalo Coulee	N	140.5	1210.3	0	0	0	0	134.9	1201.0	0	0	5.6	9.3	2	C
															1	AN
															1	DM
4523	Lower Buffalo Coulee	N	318.8	0	0	0	318.8	0	0	0	0	0	0	0	12	C
															1	AN
															1	DM
4524	Upper Hay Coulee	N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	1	C
															1	AN
															1	DM
4526	Lower Square Coulee	N	744.3	4067.8	0	0	706.6	3872.0	37.7	195.8	0	0	0	0	15	C
															1	AN
															3	DM
															1	DM
															1	DM
4528		N	130.6	0	0	0	10.9	0	119.7	0	0	0	0	0	6	C
															1	AN
															1	DM
4530	Lower Coon Coulee	N	250.5	60.9	0	0	10.9	0	119.7	0	0	0	0	0	6	C
															1	AN
															1	DM
															3	DM
4531	Upper Square Coulee	N	89.5	648.0	0	0	0.9	184.5	88.6	463.5	0	0	0	0	40	C
															1	AN
															1	DM
4532		N	160.4	497.3	0	0	0	0	158.5	487.6	0	0	1.9	9.7	3	C
															1	AN
															1	DM
4536	Truax Coulee	N	2147.5	1579.3	10.9	6.0	607.6	421.7	1517.5	1131.3	0	0	11.5	20.3	125	C
															129	C
															4	AN
															6	DM

SEASON OF USE	CURRENT AIMS BLM OTHER	REG. STOCKING		ROTEN, FORAGE		ALTERNATIVE A ENHANC. COMBINED		ALTERNATIVE B CONT. OF PRESENT MGMT.		ALTERNATIVE C ENHANCED INSTR. FORAGE		ALTERNATIVE D ENHANCED WATERBENT LIFE		ALTERNATIVE E NO LIVESTOCK GRASSING		ALTERNATIVE F NO ACTION	
		RATE/AIMS		PRODUCTION		VEG. USES		ST		ST		ST		ST		ST	
		BLM	OTHER	BLM	OTHER	ST	LY	ST	LY	ST	LY	ST	LY	ST	LY	ST	LY
03/01-10/01	72			61	115	119	217	72	72	72	72	61	61	72	72	72	72
12/01-03/31	1																
04/01-11/30	1																
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	7		15		15			7	7	7	7	15	15	15	15	7	7
04/01-03/31	2																
04/01-03/31	2																
03/01-12/01	72		85	108	115	146		72	72	72	72	85	85	72	72	72	72
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	24		25		44			24	24	24	24	25	25	24	24	24	24
04/01-03/31	2																
04/01-03/31	2																
05/01-10/31	15		23		31			15	15	15	15	23	23	15	15	15	15
04/01-03/31	2																
04/01-03/31	2																
04/27-10/20	63	343	98		153			63	63	63	63	98	98	63	63	63	63
03/01-03/31	7																
03/01-03/31	7																
03/01-02/28	90		84		133			90	90	90	90	84	84	90	90	90	90
04/01-03/31	2																
04/01-03/31	7																
03/01-02/28	39		54		102			39	39	39	39	54	54	39	39	39	39
04/01-03/31	2																
04/01-03/31	5																
03/01-02/28	64		90		150			64	64	64	64	90	90	64	64	64	64
04/01-03/31	2																
04/01-03/31	2																
04/15-11/15	191		333		496			191	191	191	191	333	333	191	191	191	191
04/01-03/31	3																
04/01-03/31	12																
03/01-02/28	116		179		226			116	116	116	116	179	179	116	116	116	116
04/01-03/31	2																
04/01-03/31	2																
05/01-10/31	20		29		39			20	20	20	20	29	29	20	20	20	20
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	24		21	208	41	416		24	24	24	24	21	21	24	24	24	24
04/01-03/31	2																
04/01-03/31	2																
04/01-09/30	71		88		118			71	71	71	71	88	88	71	71	71	71
04/01-03/31	2																
04/01-03/31	2																
03/01-12/31	9		10		13			9	9	9	9	10	10	9	9	9	9
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	181		192	1096	262	1493		181	181	181	181	192	192	181	181	181	181
04/01-03/31	2																
04/01-03/31	7																
12/01-03/31	1																
04/01-11/30	2																
05/01-10/31	35		24		47			35	35	35	35	24	24	35	35	35	35
04/01-03/31	2																
04/01-03/31	2																
03/01-10/31	60		74	12	98	16		60	60	60	60	74	74	60	60	60	60
04/01-03/31	2																
04/01-11/30	2																
12/01-03/31	2																
04/01-11/30	20	157	16	123	33	217		20	20	20	20	16	16	20	20	20	20
04/01-03/31	2																
04/01-03/31	2																
03/01-02/28	36		28	81	53	163		36	36	36	36	28	28	36	36	36	36
04/01-03/31	2																
04/01-03/31	2																
04/15-06/19	405	616	445	310	773	540		405	405	405	405	445	445	405	405	405	405
06/20-11/15																	
04/01-03/31	6																
04/01-03/31	14																

VALLEY RESOURCE AREA NON-AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MOT STS N	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
4544			79.8	313.9	0	0	2.7	0	75.6	312.4	0	0	1.3	1.5	99	C
															1	AN
															1	DM
4549		N	402.9	2.8	0	0	340.8	2.8	58.2	0	0	0	3.9	0	2	C
															1	AN
															2	DM
															1	DM
4561	Homestead Pasture	N	110.9	0	0	0	98.0	0	12.9	0	0	0	0	0	9	C
															9	C
															1	AN
															1	DM
4562	Little Brazil Creek	N	160.0	0	0	0	131.4	0	20.9	0	0	0	7.7	0	3	C
															1	AN
															1	DM
4563	Theofield Coulee	N	40.0	0	0	0	0	0	40.0	0	0	0	0	0	1	C
															1	AN
															1	DM
4566	Tom Puta	N	40.0	0	0	0	0	0	40.0	0	0	0	0	0	5	H
4567	Gravel Pits	N	188.7	0	0	0	186.0	0	0	0	0	0	2.7	0	5	C
															1	AN
															1	DM
4568	James Salaberry	N	1237.8	0	0	0	1211.9	0	0	0	0	0	25.9	0	51	C
4569		N	444.4	1129.7	0	0	50.0	0	391.1	1124.3	0	0	3.3	5.4	5	H
															7	C
															1	AN
															1	DM
4570		N	39.7	0	0	0	16.8	0	22.9	0	0	0	0	0	1	C
															1	AN
															1	DM
4575		N	301.8	0	0	0	235.1	0	53.2	0	0	0	13.5	0	2	C
															1	AN
															1	DM
4651	Upper Poplar River	N	290.3	0	0	0	227.7	0	59.6	0	0	0	3.0	0	5	C
															1	AN
															1	DM
4653	West Coal Creek	N	85.7	0	0	0	78.7	0	7.0	0	0	0	0	0	2	C
															1	AN
															1	DM
4556	West Rossmore Coulee	N	131.0	11.0	0	0	131.0	11.0	0	0	0	0	0	0	2	C
															1	AN
															1	DM
4658	Ophelm Coulee	N	79.8	0	0	0	79.8	0	0	0	0	0	0	0	1	C
															1	AN
															1	DM
4659	South Rossmore Coulee	N	319.6	0	0	0	287.8	0	31.8	0	0	0	0	0	19	C
															1	AN
															1	DM
4661	Poplar River	N	317.5	0	57.8	0	259.7	0	0	0	0	0	0	0	25	C
															1	AN
															1	DM
4662	Lower Poplar River	N	368.5	39.9	0	0	338.5	37.9	10.0	2.0	0	0	0	0	5	C
															1	AN
															4	DM
4663	Upper Middle Porcupine	N	319.7	0	0	0	256.7	0	63.0	0	0	0	0	0	5	C
															1	AN
															1	DM
4702	McEachran Creek	N	1010.2	2392.2	0	0	724.8	921.2	277.0	1469.5	0	0	8.4	1.5	18	C
															1	AN
															1	DM

SEASON OF USE	CURRENT ADMS		REG. STOCKING		NOTES, FORAGE		ALTERNATIVE A		ALTERNATIVE B		ALTERNATIVE C		ALTERNATIVE D		ALTERNATIVE E		ALTERNATIVE F	
	BLM	OTHER	DATE/ADMS		PRODUCTION		ENHANCED VEG. USES		CONTR. OF PRESENT MGMT.		ENHANCED LIVST. FORAGE		ENHANCED WATER/WILDLIFE		NO LIVESTOCK GRAZING		NO ACTION	
			BLM	OTHER	BLM	OTHER	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT	ST	LT
06/21-07/18	14	78	12	83	23	166	14	14	14	14	12	12	14	14			14	14
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	28		100	1	101	141	28	28	28	28	100	100	28	28			28	28
04/01-03/31	2																	
12/01-03/31	2																	
04/01-11/30	2																	
03/20-04/20	24		25		35		24	24	24	24	25	25	24	24			24	24
11/16-12/31																		
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	32		30		42		32	32	32	30	30	30	32	32			32	32
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	10		7		13		10	10	10	10	7	7	10	10			10	10
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	8		8		8		8	8	8	8	8	8	8	8			8	8
04/15-10/31	36		49		65		36	36	36	36	49	49	36	36			36	36
04/01-03/31	2																	
04/01-03/31	2																	
05/01-10/31	306		306		369		306	306	306	306	369	369	306	306			306	306
03/01-02/28	118		87	194	160	388	118	118	118	118	87	87	118	118			118	118
03/10-11/15																		
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	5		9		14		5	5	5	5	9	9	5	5			5	5
04/01-03/31	2																	
04/01-03/31	2																	
04/01-10/31	12		55		78		12	12	12	12	55	55	12	12			12	12
04/01-03/31	2																	
04/01-03/31	2																	
05/01-10/31	30		58		85		30	30	30	30	58	58	30	30			30	30
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	23		45		61		23	23	23	23	45	45	23	23			23	23
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	19						19	19	19	19			19	19			19	19
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	13		21		29		13	13	13	13	21	21	13	13			13	13
04/01-03/31	2																	
04/01-03/31	2																	
07/01-09/15	48		80		112		48	48	48	48	80	80	48	48			48	48
04/01-03/31	2																	
04/01-03/31	2																	
06/01-08/12	60		87		112		60	60	60	60	87	87	60	60			60	60
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	60		105	21	142	28	60	60	60	60	105	105	60	60			60	60
04/01-03/31	2																	
04/01-03/31	10																	
03/01-02/28	54		91		130		54	54	54	54	91	91	54	54			54	54
04/01-03/31	2																	
04/01-03/31	2																	
03/01-02/28	211		227	540	338	874	211	211	211	211	227	227	211	211			211	211
04/01-03/31	2																	
04/01-03/31	5																	

VALLEY RESOURCE AREA NON-AMPs CONTINUED

ALLOT. NO.	ALLOTMENT NAME	MCT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
0449	Dennis E. Bivir	N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	1	C
															1	AN
															1	DM
0460	Junier Cole	N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	2	C
															1	AN
															1	DM
0486	Edward Hoff	N	40.0	0	0	0	40.0	0	0	0	0	0	0	0	1	C
															1	AN
															1	DM
0509	Nash Brothers Inc.	N	79.3	0	0	0	66.6	0	12.7	0	0	0	0	0	2	C
															1	AN
															5	LM
0537	Geo. W. Shields	N	75.9	0	0	0	59.0	0	13.5	0	0	0	3.4	0	5	C
															1	AN
															1	DM
0551	AAA	N	39.0	0	39.0	0	0	0	0	0	0	0	0	0	1	C
															1	AN
															1	DM
0558	Orville Wold	N	40.0	0	0	0	16.0	0	24.0	0	0	0	0	0	1	C
															1	AN
															1	DM
0559	Bernard Wolff	N	17.0	0	0	0	7.0	0	0	0	0	0	10.0	0	1	C
															1	AN
SUB TOTAL NON AMPs			37792	36022	748	413	21940	18136	14173	17304	385	24	546	146		

VALLEY RESOURCE AREA UNALLOCATED TRACTS

ALLOT. NO.	ALLOTMENT NAME	MCT STS	ACRES		EXCELLENT		GOOD		RANGE CONDITION FAIR		POOR		UNSUITABLE		GRAZING ANIMALS	
			BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	BLM	OTHER	NO.	CLS
0550			79.8	0	0	0	84.0	0	13.8	0	0	0	0	0	1	AN
															1	DM
0561			85.0	0	0	0	85.0	0	0	0	0	0	0	0	1	AN
															1	DM
0562			39.9	0	0	0	0	0	39.9	0	0	0	0	0	1	AN
															1	DM
0563			57.0	0	0	0	0	0	0	0	0	0	57.0	0	1	AN
															1	DM
0564			39.4	0	0	0	4.9	0	34.5	0	0	0	0	0	1	AN
															1	DM
0565			39.9	0	0	0	37.9	0	0	0	0	0	2.0	0	1	AN
															1	DM
															1	DM
0566			72.0	0	0	0	21.0	0	51.0	0	0	0	0	0	1	AN
															1	DM
															1	DM
0567			44.0	0	0	0	44.0	0	0	0	0	0	0	0	1	AN
															1	DM
0001	Scattered Tracts		356.6	0	21	0	186.8	0	144.5	0	0	0	4.4	0		
SUB TOTAL - UNALLOCATED			814		21		444		286				63			
TOTAL VALLEY RA			662345	261879	6587	4312	288843	130148	337864	123630	2448	258	26603	3531		
GRAND TOTAL FOR PRAIRIE POTHOLEHS EIS			1749238	878357	14832	6810	1035208	578237	623022	266994	6803	2172	69373	24144		

Havre Resource Area

Allotment	Acres	Allotment	Acres	Allotment	Acres	Allotment	Acres
6001	2,467	6063	1,077	6228	75	6463	609
6005	5,672	6065	357	6229	278	6470	1,883
6006	10,603	6066	1,227	6230	2,528	6472	265
6007	1,124	6067	556	6231	1,663	6490	113
6008	1,778	6069	1,125	6232	582	6493	330
6009	631	6071	3,231	6233	2,418		
6010	1,071	6072	909	6234	199	Total	
6011	2,952	6074	643	6235	2,748	128	208,247
6012	7,395	6075	3,336	6236	1,365		
6013	889	6083	688	6239	2,253		
6014	7,193	6086	678	6243	479		
6017	553	6087	3,385	6244	226		
6018	1,450	6088	639	6251	2,507		
6020	10,284	6090	1,669	6302	693		
6021	709	6091	593	6338	1,887		
6022	1,938	6092	1,008	6360	469		
6024	1,516	6095	754	6362	682		
6027	733	6099	3,367	6364	214		
6029	1,279	6101	1,454	6378	1,919		
6030	1,111	6103	470	6389	0		
6031	902	6105	292	6395	12		
6033	2,248	6107	1,194	6396	2,594		
6035	1,538	6111	2,438	6398	1,102		
6037	435	6115	65	6399	1,676		
6039	1,283	6119	3,171	6412	1,117		
6040	656	6120	1,169	6414	280		
6041	393	6121	1,304	6434	1,614		
6043	676	6122	795	6435	861		
6046	1,716	6123	1,720	6439	1,584		
6047	2,089	6125	1,090	6442	48		
6048	998	6129	4,599	6443	327		
6050	959	6131	1,554	6444	139		
6051	326	6132	2,348	6446	271		
6052	1,337	6133	2,512	6447	311		
6053	367	6134	1,473	6448	4,174		
6055	827	6136	5,799	6449	1,418		
6056	1,120	6137	2,488	6450	990		
6057	1,031	6159	349	6451	1,676		
6058	3,808	6160	404	6452	578		
6060	625	6175	107	6453	263		
6062	8,719	6227	4,579	6455	2,162		

Phillips Resource Area

Allotment	Acres	Allotment	Acres	Allotment	Acres	Allotment	Acres	Allotment	Acres	Allotment	Acres
5000	433	5028	432	5063	797	5095	2,564	5144	3,784	5334	210
5001	1,811	5030	2,497	5064	667	5096	2,056	5150	440	5336	272
5002	6,789	5031	595	5065	228	5097	1,154	5152	576	5339	411
5003	948	5032	396	5066	2,145	5100	1,508	5153	2,855	5343	892
5004	733	5033	975	5067	430	5101	800	5154	1,637	5344	3,396
5005	1,204	5034	4,679	5069	1,383	5104	1,292	5155	1,262	5345	268
5006	1,720	5035	4,811	5070	405	5106	256	5300	855	5348	37
5007	763	5036	6,547	5071	4,840	5107	1,740	5301	317	5349	902
5008	3,000	5037	5,590	5072	567	5108	860	5304	1,704	5351	1,580
5009	444	5038	934	5073	253	5109	2,476	5305	56	5352	1,171
5010	1,259	5039	4,047	5074	279	5110	2,433	5306	99	5353	72
5011	4,566	5040	1,341	5075	1,356	5111	1,293	5307	918	5354	718
5012	13,215	5041	5,478	5076	273	5112	1,087	5309	513	5355	---
5013	7,234	5042	1,000	5078	226	5114	136	5310	177	5356	248
5014	7,891	5043	9,573	5080	1,029	5115	646	5312	520	5357	621
5015	8,070	5044	1,766	5084	464	5116	2,946	5315	223	5358	30
5017	3,912	5045	586	5085	648	5122	124	5316	572	5359	473
5018	537	5047	5,986	5086	2,479	5127	230	5319	923	5361	447
5019	1,177	5049	31	5087	5,433	5129	162	5320	43	5362	149
5020	338	5051	5,207	5088	358	5130	2,086	5322	342	5363	1,208
5021	3,483	5052	401	5089	8,474	5131	2,911	5323	214	5366	341
5022	1,942	5053	1,874	5090	145	5132	752	5324	716	5368	717
5023	2,864	5056	994	5091	622	5133	1,313	5325	405	5369	2,226
5024	2,001	5058	671	5092	180	5134	255	5328	963	5371	237
5026	8,086	5059	1,165	5093	7,185	5135	322	5331	333	5372	5,468
5027	913	5062	6,324	5094	2,300	5136	366	5332	648	5373	577

Phillips Resource Area Continued

Allotment	Acres	Allotment	Acres	Allotment	Acres
5374	2,186	5409	563	5445	4,087
5376	660	5410	717	5446	1,149
5377	163	5411	4,379	5454	1,283
5378	504	5413	2,742	5460	2,053
5379	857	5414	1,865	5461	612
5384	638	5415	6,947	5600	389
5385	613	5416	11,426		
5386	2,751	5417	14,372	Total	
5387	6,134	5419	603	214	440,611
5388	2,411	5420	1,019		
5389	888	5423	522		
5390	2,237	5424	10,799		
5391	628	5426	4,472		
5392	378	5427	10,128		
5393	293	5428	1,983		
5394	319	5429	12,687		
5398	451	5430	709		
5399	812	5432	1,546		
5400	984	5436	535		
5401	608	5437	139		
5402	1,980	5439	3,171		
5404	404	5440	2,544		
5405	4,099	5441	907		
5406	3,978	5442	2,706		
5407	2,912	5443	4,065		
5408	10,075	5444	2,618		

Valley Resource Area

Allotment	Acres	Allotment	Acres	Allotment	Acres	Allotment	Acres	Allotment	Acres	Allotment	Acres	Allotment	Acres
0474	3	4022	3,520	4072	917	4301	2,739	4540	1,524	4652	111	4720	118
0475	238	4023	3,300	4078	2,009	4302	8,313	4541	341	4654	276	4721	1,005
0479	110	4024	2,949	4079	1,416	4303	8,123	4542	1,041	4655	381	4722	737
0482	73	4025	5,850	4080	1,483	4308	1,842	4543	392	4657	420	4723	4,730
0499	37	4026	1,284	4082	1,118	4309	2,536	4545	4	4660	332	4724	1,509
0525	49	4029	498	4083	133	4312	121	4546	3,278	4664	296	4725	123
0526	3	4030	729	4089	444	4503	130	4547	458	4665	270	4726	9,191
0557	155	4031	764	4091	479	4510	194	4548	3,542	4666	80	4727	296
4000	1,132	4032	2,442	4092	1,077	4511	309	4550	6,470	4700	2,492	4728	1,952
4001	1,094	4037	419	4098	27	4512	341	4551	5,537	4701	2,370	4035	380
4002	1,837	4038	572	4099	472	4513	260	4552	99	4703	2,125	4044	380
4003	4,707	4041	9,807	4100	240	4514	1,300	4553	6,689	4704	124		
4005	1,066	4049	311	4101	1,020	4515	259	4554	566	4705	276	Total	
4006	1,502	4052	731	4102	2,019	4516	165	4555	693	4707	7,309	167	284,719
4008	2,930	4053	5,089	4105	806	4518	564	4556	157	4708	7,764		
4009	1,169	4054	1,072	4106	2,765	4519	1,680	4557	2,358	4709	527		
4010	2,159	4055	7,773	4109	1,827	4521	598	4558	473	4710	119		
4011	55	4056	1,876	4111	1,726	4525	1,300	4559	129	4711	7,137		
4012	4,262	4058	674	4112	3,131	4527	1,192	4560	932	4712	490		
4013	1,205	4059	2,064	4113	1,151	4529	443	4563	2,528	4713	2,579		
4014	2,364	4061	1,262	4116	1,957	4533	1,474	4564	582	4714	641		
4015	7,489	4066	382	4117	1,290	4534	2,003	4571	4,273	4715	617		
4016	306	4067	858	4121	1,486	4535	2,304	4573	15	4716	2,755		
4019	3,826	4068	412	4125	34	4537	658	4574	318	4717	4,441		
4020	129	4069	703	4126	310	4538	1,306	4576	70	4718	11,862		
4021	1,117	4071	449	4200	263	4539	1,284	4650	73	4719	135		

APPENDIX 2.5: RANGE DEVELOPMENT IMPLEMENTATION COSTS

The following figures include the costs of implementing all range development projects, the salary and overhead costs of BLM operations personnel to initiate and monitor range development contracts and the cost of obtaining cultural clearance on the lands involved. Range development projects included in the figures are mechanical treatments, management and enclosure fences, water sources, noxious weed control, prairie dog control and land rehabilitation, and cattle guards. The costs of snow catchments, shade sources and oilers are not included because they are not quantified by alternative. The figures are for the total 7 year short term time period. The figures by alternative are as follows:

Alternative A	\$14,356,345
Alternative B	\$ 8,401,540
Alternative C	\$31,655,828
Alternative D	\$17,774,900
Alternative E	\$15,126,550
Alternative F	0

The costs for each alternative were determined in the following manner (Alternative A will be used as an example):

<u>Costs of Range Development Projects</u> (Source: BLM, 1980)	
Mechanical Treatments, 281,000 acres at \$20/acre	\$ 5,620,000
Management Fences, 650 miles at \$2,700/mile	\$ 1,755,000
Exclosure Fences, 163 miles at \$8,100/mile	\$ 1,320,300
Water Sources, 1,000 sources at \$1,500/source	\$ 1,500,000
Noxious Weed Control, 2,200 acres at \$80/acre	\$ 176,000
Prairie Dog Control and Rehabilitation 1,100 acres/ at \$25/acre	\$ 27,500
Cattle Guards, 50 units at \$1,300/unit	\$ 65,000
Total Costs	\$10,463,800

<u>Costs of Operations Personnel</u> (Source: BLM, 1980)	
1,274 work months x \$2,200/work month =	\$ 2,802,800

<u>Costs of Cultural Clearance</u> (Source: BLM, 1980)	
Mechanical Treatments, 281,000 acres at \$3.50/acre	\$ 983,500
Management Fences, 650 miles at \$15/mile	9,750
Exclosure Fences, 163 miles at \$15/mile	2,445
Water Sources, 1,000 sources at \$80/source	80,000
Noxious Weed Control, 2,200 acres at \$3.50/acre	7,700
Prairie Dog Control, 1,100 acres at \$3.50/acre	3,850
Cattle Guards, 50 units at \$50/unit	2,500
Total Costs	\$ 1,089,745

<u>Total Range Development Implementation Costs For Alternative A</u>	
Construction	\$10,463,800
BLM Personnel	2,802,800
Cultural Clearance	\$ 1,089,745
	\$14,356,345

APPENDIX 2.6: ALLOTMENT MANAGEMENT PLAN RATING CRITERIA

The point system below was used to determine which allotment management plans would be implemented first. Various factors of the allotments were rated (see the table) including range condition, acreage, and the potential productivity:

<u>Factor</u>	<u>Points</u>
<u>Range Condition</u>	
90 - 100% good and excellent	0
80 - 89%	0
70 - 79%	5
60 - 69%	10
50 - 59%	15
40 - 49%	20
30 - 39%	25
20 - 29%	30
10 - 19%	35
0 - 9%	40

Allotment Acreage

Greater than 10,000	40
Greater than 5,000 - 9,999 BLM acres	30
2,500 - 4,999 BLM acres	20
1,000 - 2,499 BLM acres	10
Less than 1,000 BLM acres	5

Soil Productivity (Potential for Improvement)

Dominant Soil Subgroup

1. 6, 17 (Floodplains)	20
2. 1, 2, 5, 7, 8, 9, 11, 18 (Management with treatments)	15
3. 3, 4, 10, 12, 16 (Grazing management alone)	15
4. 15, 19 (Forested soils of mountains)	10
5. 13, 14, 16 (Low potential)	0

The above factors were rated from SVIM data. Following this grouping of priorities, an additional rating was placed on each allotment from the Alternative Objective Matrix (Appendix). These additional points establish priorities within the broad groups. These additional factors are:

High value riparian habitat	10
High value reservoirs	5
Antelope wintering areas	5
Critical deer habitat	5
Prairie dog towns	10
Sharptail leks	1
Sage grouse leks	1

HAYRE RA

Proposed AMP Allotment	Range Condition	Average	Productivity	Subtotal	High Value Riparian	High Value Reservoir	Antelope Wintering Area	Critical Bios Habitat	Prairie Dog Toads	Sharp-tailed Grouse	Sage Grouse	Grand Total
6006	15	40	15	70	10	5				1	1	87
6020	5	40	15	60	10						1	76
6069	30	40	15	85				5			1	86
6227	15	30	15	60		5				1	1	67
6251	15	20	15	50	10			5		1	1	67
6355	35	30	15	80				5			1	86
6378	40	20	15	75				5	10		1	91
6386	35	20	15	70				5			1	76
6398	40	10	15	65				5			1	71
6399	40	10	15	65				5			1	71
6434	40	10	15	65				5			1	71
6435	40	10	15	65				5			1	71
6439	40	10	15	65				5			1	71
6446	40	10	15	65				5			1	71
6463	40	10	15	65				5			1	71
6490	40	10	15	65				5			1	71
6358	35	10	15	60				5			1	66
6362	40	10	15	65							1	66
6449	40	10	15	65							1	66
6450	40	10	15	65							1	66
6451	40	10	15	65							1	66
6452	40	10	15	65							1	66
6455	30	20	15	65							1	66
6470	40	10	15	65							1	66
6471	40	10	15	65							1	66
6451	40	10	15	65								
6452	40	10	15	65								
6453	40	10	15	65								
6470	40	10	15	65								
6471	40	10	15	65								

PHILLIPS RA

5012		40	15	55	10					1	1	67
5023	10	40	15	65						1	1	67
5026	10	40	15	65						1	1	67
5094	10	40	15	65	10		5	5		1		86
5095	15	30	15	60				5		1	1	67
5372	10	30	15	65		5				1	1	67
5406	25	15	15	60						1	1	67
5416	10	40	15	65					10	1	1	77
5424	10	40	15	65	10					1	1	77
5384	40	10	15	65							1	66
5390	40	10	15	65							1	66
5062	5	30	15	50	10					1	1	62

VALLEY RA

4015	20	40	15	75				5		1	1	82
4019	30	30	15	75				5		1		82
4024	35	30	15	80				5		1		85
4025	25	30	15	70				5		1	1	77
4054	35	40	15	90			5	5		1		101
4055	20	40	15	75		5		5		1	1	87
4071	35	40	15	90	10			5		1		111
4116	15	30	15	60				5		1	1	67
4126	40	0	15	55	10			5		1		71
4302	15	40	15	70				5				80
4303	15	40	15	70	10			5		1		91
4535	40	30	15	85						1		67
4540	40	20	15	75							1	76
4546	15	40	15	70				5				75
4550	10	40	15	65				5		1	1	72
4551	30	40	15	85							1	86
4553	25	40	15	80						1	1	82
4554	30	20	15	65						1	1	67
4557	20	40	15	75								76
4707	25	40	15	80						1	1	82
4711	20	40	15	75	10		5			1		91
4722	30	30	15	75			5	5		1		86
4724	30	10	15	55	10		5	5		1		76
4009	15	15	15	60				5				65
4023	10	30	15	55				5		1		66
4092	30	10	15	55			5	5		1		66
4537	40	10	15	65				5				66
4539	40	10	15	65							1	66
4573	35	30	15	70							1	71
4703	30	20	15	65							1	65
4005	35	10	15	60						1	1	62
4113	30	10	15	55			5			1	1	62
4503	40		15	55						1	1	62

APPENDIX 3.1: PHYSICAL PROPERTIES OF SOILS

Column

1. SOIL NAME

This column includes soil series, soil subgroups, and miscellaneous land types.

2. GEOMORPHIC SOIL SUBGROUP

A group of soils having a unique kind and degree of limitation for alternative land use and treatment based on parent material, soil quality and land features.

3. SLOPE CLASSES

Description	Slope Percent	Description	Slope Percent
Nearly level	0 to 4	Moderately steep or hilly	15 to 25
Gently sloping and undulating	2 to 4	Steep	25 to 45
Moderately sloping or gently rolling	4 to 8	Very steep	45 + %
Strongly sloping or strongly rolling	8 to 15		

4. SOIL DEPTH FAVORABLE TO PLANT ROOTS

Depth to bedrock, hardpan, water table, or other restrictive layers that would stop or hinder the penetration of roots. It is the depth of soil readily penetrated by roots. Depth classes are:

	Inches		Inches
Very shallow	Less than 10	Deep	40 to 60
Shallow	10 to 20	Very deep	More than 60
Moderately deep	20 to 40		

5. NATURAL DRAINAGE CLASS

Drainage that existed during the development of the soil. Seven different classes of natural soil drainage are recognized.

Excessively drained soils are commonly very porous and rapidly permeable and have a low water-holding capacity.

Somewhat excessively drained soils are also very permeable and are free from mottling throughout their profile.

Well-drained soils are nearly free from mottling and are commonly of intermediate texture.

Moderately well drained soils commonly have a slowly permeable layer in or immediately beneath the solum. They have uniform color in the A horizon and have mottling in the lower part of the B or C horizon.

Somewhat poorly drained soils are wet for significant periods but not all the time, and some soils commonly have mottling at a depth below 6 to 16 inches.

Poorly drained soils are wet for long periods; they are light gray and generally mottled from the surface downward, but some have few or no mottles.

Very poorly drained soils are wet nearly all the time. They have a dark-gray or black surface layer and are gray or light gray, with or without mottling, in the deeper parts of the profile.

6. SOIL TEXTURAL CLASSES

BASIC CLASS NAME

GENERAL TERMS

Sand-Soil material that contains 85% or more of sand; percentage of silt, plus 1.5 times the percentage of clay, shall not exceed 15.	Coarse Textured Soils	Sandy Soils
Loamy Sand-Soil material that contains at the upper limit 85 to 90% sand, and the percentage of silt plus 1.5 times the percentage of clay is not less than 15; at the lower limit it contains not less than 70 to 85% sand, and the percentage of silt plus twice the percentage of clay does not exceed 30.	Coarse Textured Soils	Sandy Soils
Sandy Loam-Soil material that contains either 20% clay or less, and the percentage of silt plus twice the percentage of clay exceeds 30, and 52% or more sand; or less than 7% clay, less than 50% silt, and between 43 and 52% sand.	Moderately Coarse Textured Soils	Loamy Soils
Fine Sandy Loam-30% or more fine sand and less than 30% very fine sand (or) between 15 and 30% very coarse, coarse, and medium sand.	Moderately Coarse Textured Soils	Loamy Soils
Very Fine Sandy Loam-30% or more very fine (or) more than 40% fine and very fine sand, at least half of which is very fine and less than 15% very coarse, coarse, and medium sand.	Moderately Coarse Textured Soils	Loamy Soils
Loam-Soil material that contains 7 to 27% clay, 28 to 50% silt, and less than 52% sand.	Medium Textured Soils	Loamy Soils
Silt Loam-Soil material that contains 50% or more silt and 12 to 27% clay (or) 50 to 60% silt and less than 12% clay.	Medium Textured Soils	Loamy Soils
Silt-Soil material that contains 80% or more silt and less than 12% clay.	Medium Textured Soils	Loamy Soils
Clay Loam-Soil material that contains 27 to 40% clay and 20 to 45% sand.	Moderately Fine Textured Soils	Loamy Soils
Sandy Clay Loam-Soil material that contains 20 to 35% clay, less than 28% silt, and 45% or more sand.	Moderately Fine Textured Soils	Loamy Soils
Silty Clay Loam-Soil material that contains 27 to 40% clay and less than 20% sand.	Moderately Fine Textured Soils	Loamy Soils
Sandy Clay-Soil material that contains 35% or more clay and 45% or more sand.	Fine Textured Soils	Clayey Soils
Silty Clay-Soil material that contains 40% or more clay and 40% or more silt.	Fine Textured Soils	Clayey Soils
Clay-Soil material that contains 40% or more clay, less than 45% sand, and less than 40% silt.	Fine Textured Soils	Clayey Soils

6. SOIL TEXTURAL CLASSES continued

- a. Surface Layer - The uppermost part of the soil, ordinarily moved in tillage, or its equivalent in uncultivated soils and ranging in thickness from 4 to 8 inches. Frequently designated as the "Flow layer", or the Ap horizon.
- b. Subsoil - Technically, the B horizon, the part of the solum below plow depth.

7. PERMEABILITY

The quality which permits movement of water and air through the most restrictive layer in the rooting zone. Terms used to describe permeability are:

	Inches per hour		Inches per hour
Very slow	Less than 0.06	Moderately rapid	2.00 - 6.00
Slow	0.06 - 0.20	Rapid	6.00 - 20.00
Moderately slow	0.20 - 0.60	Very rapid	More than 20.0
Moderate	0.60 - 2.00		

8. AVAILABLE WATER CAPACITY

The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field capacity and the amount at wilting point. It is expressed as inches of water in the soil profile and rated as follows:

	Inches		Inches
Very low	Less than 2.3	Moderate	5.0 - 7.5
Low	2.5 - 5.0	High	More than 7.5

9. SURFACE WATER RUNOFFDescriptions

- Very slow - Free water lies on the surface for long periods or enters immediately into soil.
- Slow - Free water covers the soil for significant periods or enters the soil rapidly and a large part of the water passes through the profile or evaporates into the air.
- Medium - Surface water flows away at such a rate that a moderate proportion of the water enters the soil profile and free water lies on the surface for only short periods. With medium runoff, the loss of water over the surface does not reduce seriously the supply available for plant growth.
- Rapid - A large proportion of the precipitation moves rapidly over the surface of the soil and a small part moves through the soil profile. Surface water runs off nearly as fast as it is added.
- Very rapid - A very large part of the water moves rapidly over the surface of the soil and a very small part goes through the profile.

10. EROSION SUSCEPTIBILITYa. Water Erosion Ratings

Water erosion hazard is rated for soils that are bare of vegetation.

PERCENT SLOPES	LENGTH OF SLOPES	DOMINANT TEXTURE OF SOIL PROFILE			
		Fine	Medium textured	Moderately coarse	Coarse textured
0 - 2	Less than 250'	Slight	Slight	Slight	Slight
	250 - 1000'	Slight	Slight	Slight	Slight
	More than 1000'	Slight	Slight	Slight	Slight
2 - 4	Less than 250'	Slight	Slight	Slight	Slight
	250 - 1000'	Moderate	Moderate	Slight	Slight
	More than 1000'	Moderate	Moderate	Moderate	Slight
4 - 8	Less than 250'	Moderate	Moderate	Slight	Slight
	250 - 1000'	Moderate	Moderate	Moderate	Slight
	More than 1000'	High	Moderate	Moderate	Slight
8 - 15	Less than 250'	High	Moderate	Moderate	Moderate
	250 - 1000'	High	High	Moderate	Moderate
	More than 1000'	High	High	High	Moderate
15 - 25	Less than 250'	High	High	Moderate	Moderate
	250 - 1000'	High	High	High	Moderate
	More than 1000'	High	High	High	High
25+	All	High	High	High	High

b. Wind Erodibility Groups (WEG)WEG Predominant Soil Texture Class of Surface Layer

- (Very Severe) - All sands: coarse sand, medium sand, and very fine sand.
- (Very severe) - All loamy sands: loamy coarse sand, loamy sand, loamy fine sand and loamy very fine sand.
- (Severe) - All sandy loams: coarse sandy loam, sandy loam, fine sandy loam and very fine sandy loam.
- (Severe) - All calcareous loam, silt loam, sandy clay loam, or calcareous clay loam and silty clay loam soils with less than 35 percent clay content and more than 5 percent finely divided calcium carbonate.
- (Severe) - All clays and silty clays, and clay loam and silty clay loam soils with more than 35 percent clay.
- (Moderate) - Noncalcareous loam and silt loam soils with less than 18 percent clay, and all noncalcareous sandy clay loam and sandy clay soils.
- (Moderate) - All loam and silt loam soils with more than 18 percent clay, and clay loam soils with less than 35 percent clay content.
- (Slight) - Noncalcareous silty clay loam soils with less than 35 percent clay.
- (Non-erodible) - Soils not suitable for cultivation due to wetness and percent rock fragments. Wind erosion not a problem.

11. HYDROLOGICAL SOIL GROUP

- A. (Low runoff potential). Soils having high infiltration rates even when thoroughly wetted and consisting chiefly of deep, well to excessively drained sands or gravels. These soils have a high rate of water transmission.
- B. Soils having moderate infiltration rates when thoroughly wetted and consisting chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.
- C. Soils having slow infiltration rates when thoroughly wetted and consisting chiefly of soils with a layer that impedes downward movement of water, or soils with moderately fine to fine texture. These soils have a slow rate of water transmission.
- D. (High runoff potential). Soils having very slow infiltration rates when thoroughly wetted and consisting chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. These soils have a very slow rate of water transmission.

12. SOIL LOSS EQUATION

"K" Factor - It is the soil erodibility factor. It shows how easily each soil will erode when rain falls on bare ground; or is a measure of the susceptibility of soil particles to detachment and transport by rainfall and runoff.

13. RESTRICTIVE SOIL FACTOR(S)

Soil characteristics affecting production, sedimentation, or selective treatments for the land.

USE OF CRITERIA IN RATING SOIL COMPACTION SUSCEPTIBILITY

Prairie Pothole (EIS)

Compaction Susceptibility Rating	Texture										Structure		Degree of Wetness		Permeability								
	Surface					Subsurface					Surface	Subsurface	Surface	Subsurface	VS	S	MS	M	MR	R			
1. High			X	X	X					X	X	Pl, M, G	Pr, C, M	M		D, M	X	X	X				
2. Moderate			X					X	X	X		Pl, G	Pr, G, M	M		D, M		X	X				
3. Low	X	X	X			X	X	X				SC, G	C, SG, B	M or D		M or D				X			
Soil Texture					Structure					Wetness					Permeability								
C	- Coarse					Pl	- Platy					M	- Moist or wet					VS	- Very Slow				
MC	- Moderately Coarse					M	- Massive					D	- Dry					S	- Slow				
Me	- Medium					G	- Granular											MS	- Moderately Slow				
MoF	- Moderately Fine					Pr	- Prismatic											M	- Moderate				
F	- Fine					C	- Columnar											MR	- Moderately Rapid				
						SC	- Single Grain											R	- Rapid				
						B	- Blocky																

Rock fragments in soils reduce soil compaction susceptibility ratings.

SOURCE:

Terms, definitions and information is from or modified from the following sources:

1. Soil Survey Manual
by Soil Survey Staff, 1951
Bureau of Plant Industry, Soils and Agricultural Engineering
2. Soil Taxonomy
by Soil Survey Staff, 1975
Soil Conservation Service
3. Soil Survey Interpretations
by Soil Survey Staff, continuous updates
Soil Conservation Service

1 Soil Name	2 Geo-morphic Soil Sub-group	3 Range in Slope Classes	4 Soil Depth Favorable to Plant Roots	5 Natural Drainage Class	6 FEATURE		7 Permeability of Most Restrictive Layer	8 Available Water Capacity	9 Surface Water Runoff	10 EROSION SUSCEPTIBILITY		11 Hydrologic Soil Group	12 Soil Loss Equation "K" Factor (Surface Layer)	13 Restrictive Soil Factors
					Surface Layer	Subsoil or Underlying Material				Water Erosion Rating	Wind Erosion Susceptibility Group (WEG)			
Bedlands	3 4	Steep-very steep	None	None	Variable texture or bedrock	Bedrock	Very slow	Very low	Very rapid	High	Severe (4)	D	.64	Barren hills; ridges and slopes; erosion hazard
Rock Outcrop	3 4 5	Steep-very steep	None	None	Bedrock	Bedrock	Very slow	Very low	Very rapid	High	Severe (4)	D	.64	Unweathered sandstone, siltstone and shale; erosion hazard
Shale	3 4	Gently sloping-very steep	None	None	Clay over shale	Shale	Very slow	Very low	Very rapid	High	Severe (4)	D	.64	Nearly barren shale; erosion hazard
Ustic Terrifluvents	6 17	Nearly level-gently sloping	Deep	Moderately well-drained	Sandy loam-clay loam	Sandy loam-clay loam stratified	Moderately slow	High	Medium	Slight moderate	Severe (4)	C	.32	Variable textures; subject to flooding; wind erosion hazard; dissected by stream channels; moderate compaction susceptibility
Ustic Torriorthents (Terreses-fans)	6 4	Nearly level-moderately sloping	Deep	Well drained	Loam-clay loam	Sandy loam-clay loam stratified	Moderately slow	High	Slow-medium	Slight moderate	Severe (4)	C	.32	Variable textures; dissected by stream channels; erosion hazard; moderate compaction susceptibility
Ustic Torriorthents (Upland bedrock soils)	3 3 5	Strongly sloping-very steep	Shallow-moderately deep	Well drained	Clay-clay loam	Clay-clay loam over shale	Slow-very slow	Low-high	Rapid	Severe	Moderate (5) -Severe (4)	D	.37	Variable textures; permeability; erosion hazard; moderate compaction susceptibility
Ustifluvents, saline	6	Nearly level	Deep	Somewhat poorly drained	Clay loam-clay loam	Sandy loam-clay loam stratified	Moderately slow	High	Slow-medium	Slight moderate	Non-erosive (8)	D	.37	Variable textures; permeability; erosion hazard; high compaction susceptibility
Aquic Ustifluvents	6 17	Nearly level-gently sloping	Deep	Somewhat poorly drained	Loam-clay loam	Loam-clay loam	Moderately slow	High	Slow	Slight moderate	Non-erosive (8)	C	.32	Drainage; flooding hazard; high compaction susceptibility
Fluviscous Haploborols	6 17	Nearly level-gently sloping	Deep	Somewhat poorly drained	Clay loam	Clay loam, moderately loam stratified	Moderately slow	High	Slow	Slight moderate	Non-erosive (8)	C	.32	Drainage; flooding hazard; high compaction susceptibility
Fluviscous, saline	6	Nearly level-gently sloping	Deep	Poorly drained	Loam to clay	Loam to clay	Moderately slow	High	Slow	Slight moderate	Non-erosive (8)	C	.32	Drainage; flooding hazard; saline soil; high compaction susceptibility
Typic Fluviscous	6 17	Nearly level-gently sloping	Deep	Poorly drained	Loam to clay	Loam to clay	Moderately slow	High	Slow-pounded	Slight moderate	Non-erosive (8)	C	.32	Drainage; flooding hazard; high compaction susceptibility
Typic Ustifluvents	6	Nearly level	Deep	Well drained	Clay loam-clay loam	Clay loam-sandy loam stratified	Moderately slow	High	Slow	Slight moderate	Severe (4)	C	.32	Variable textures; subject to flooding; wind erosion hazard; dissected by stream channels; moderate compaction susceptibility
Abor	4	Gently sloping-very steep	Moderately deep	Well drained	Silty clay	Silty clay over shale	Slow	Low	Medium rapid	Moderate-high	Severe (4)	D	.37	Texture; permeability; depth; high compaction susceptibility; wind erosion hazard
Abaher	12	Nearly level-moderately sloping	Deep	Moderately well drained	Loam	Clay	Very slow	High	Slow-medium	Slight moderate	Moderate (5)	D	.49	Claypan; texture; permeability; drainage; acidic soil; high compaction susceptibility
Accl	10	Nearly level-moderately sloping	Deep	Well drained	Clay loam	Silty clay	Slow	High	Slow-medium	Slight moderate	Moderate (5)	D	.37	Texture; permeability; crusty surface layer; high compaction susceptibility

Soil Name	Geo-morphic Soil Sub-group	Range in Slope Classes	Soil Depth Favorable to Plant Roots	Natural Drainage Class	TEXTURE		Permeability of Most Restrictive Layer	Available Water Capacity	EROSION SUSCEPTIBILITY		Hydrologic Soil Group	Soil Loss Equation "K"	Restrictive Soil Factors
					Surface Layer	Subsoil or Underlying Material			Water Runoff	Water Erosion Erodibility Group (WEI)			
Adger	12	Nearly level -moderately sloping	Deep	Moderately well drained	Loam	Clay	Very slow	High	Slow-medium	Slight Moderate (6)	D	.49	Clayey; texture; permeability; drainage; sodic soil; high compaction susceptibility
Arcette	15	Moderately steep-very steep	Deep	Excessively drained	Very gravelly loam	Extremely gravelly loam	Rapid permeability	Very low	Very slow	Moderate-high	B	.17	Rock fragments; available water capacity; slope
Asanmi-boine	8	Nearly level -strongly sloping	Deep	Well drained	Fine sandy loam	Sandy clay loam	Moderate	High	Slow	Slight -moderate	B	.24	Texture; wind erosion hazard
Atteana	9	Nearly level -moderately sloping	Deep	Well drained	Loam	Clay loam over very gravelly loamy sand	Moderate	Low	Slow-medium	Slight Moderate (6)	A	.37	Available water capacity; moderate compaction susceptibility
Barkof	4	Gently sloping steep	Moderately deep	Well drained	Clay	Clay over shale	Very slow	Moderate	Medium-rapid	Moderate-high	D	.37	Texture; permeability; high compaction susceptibility
Beacovy	4	Gently sloping-steep	Moderately deep	Well drained	Clay	Clay over hard platy shale	Very slow	Moderate	Medium-rapid	Moderate-high	D	.37	Texture; permeability; wind erosion hazard; high compaction susceptibility
Bearpaw	1	Nearly level -moderately sloping	Deep	Well drained	Loam	Clay loam	Slow	High	Slow-medium	Slight Moderate (6)	B	.37	Permeability; high compaction susceptibility
Beaverell	14	Nearly level -moderately sloping	Deep	Well drained	Gravelly loam	Gravelly clay loam over very gravelly loamy sand	Moderate	Very low	Slow	Slight Moderate (6)	B	.32	Rock fragments; available water capacity
Beaverton	14	Nearly level -moderately steep	Deep	Well drained	Gravelly loam or loam	Extremely gravelly underlying material	Moderate	Very low	Slow or medium	Slight Moderate (3)	A	.28	Rock fragments; available water capacity
Belain	15 18	Gently sloping steep	Moderately deep	Well drained	Loam	Gravelly loam over bedrock	Moderate	Low	Slow	Slight Moderate-high (5)	B	.37	Available water capacity; moderate compaction susceptibility
Benz	9	Nearly level -strongly sloping	Deep	Well drained	Clay loam	Loam and clay loam stratified	Slow	High	Slow-medium	Slight -high	D	.37	Permeability; strongly to very strongly alkaline underlying material; high compaction susceptibility
Bitton	9	Strongly sloping-very steep	Deep	Well drained	Gravelly loam	Very gravelly rapid loam	Moderately rapid	Low	Slow-medium	Slight -high (5)	B	.32	Rock fragments; available water capacity
Blanchard	8	Undulating -strongly rolling	Deep	Excessively drained	Loamy fine sand	Fine sand	Rapid	Low	Very slow	Slight Very severe (2)	A	.15	Texture; available water capacity; wind erosion hazard
Boudoin	6	Nearly level	Deep	Well drained	Clay	Clay	Very slow	High	Slow	Slight Severe (4)	D	.37	Texture; permeability; high compaction susceptibility
Brookway	9	Nearly level -moderately sloping	Deep	Well drained	Silt loam	Silt loam and silty clay loam stratified	Moderately slow	High	Slow-medium	Slight Severe (4L)	B	.32	Wind erosion hazard; moderate compaction susceptibility
Busby	8	Gently sloping-strongly sloping	Deep	Well drained	Fine sandy loam	Fine sandy loam	Moderately rapid	Moderate	Slow-medium	Slight -moderate	B	.20	Wind erosion hazard
Cabbe	5	Moderately sloping-very steep	Shallow	Well drained	Loam	Loam and clay loam over bedrock	Moderate	Very low	Medium-rapid	Moderate-high	C	.37	Depth; available water capacity; water & wind erosion hazard; moderate compaction susceptibility
Cabbart	5	Gently sloping-very steep	Shallow	Well drained	Loam	Loam over bedrock	Moderate	Very low	Slow-rapid	Slight -high	D	.37	Depth; available water capacity; water and wind erosion hazard; moderate compaction susceptibility

APPENDIX 3.1: CONTINUED

1	2	3	4	5	6		7	8	9	10		11	12	13
Soil Name	Geomorphic Soil Sub-group	Range in Slope Classes	Soil Depth Favorable to Plant Roots	Natural Drainage Class	Surface Layer	Subsoil or Underlying Material	Permeability of Most Restrictive Layer	Available Water Capacity	Surface Water Runoff	EROSION SUSCEPTIBILITY Water Erosion Rating (WER)	Wind Erodibility Group (WEG)	Hydrologic Soil Group	Soil Loss Equation "K" Factor (Surface Layer)	Restrictive Soil Factors
Canbert	5	Nearly level -moderately steep	Moderately deep	Well drained	Silt loam	Silt loam over siltstone	Moderate	Moderate	Slow-rapid	Slight -high	Moderate (6)	B	.37	Depth; moderate compaction susceptibility; water erosion hazard
Castner	19	Nearly level -very steep	Shallow	Well drained	Very channery loam	Very channery loam over sandstone	Moderate	Very low	Slow-rapid	Slight -high	Moderate (3)	C	.32	Depth; rock fragments; available water capacity
Cheadle	19	Gently sloping-very steep	Shallow	Well drained	Stony loam	Very flaggy loam over sandstone	Moderate	Very low	Slow-rapid	Slight -high	Moderate (3)	C	.32	Depth; rock fragments; available water capacity
Cherry	10	Nearly level -strongly sloping	Deep	Well drained	Silty clay loam	Silty clay loam	Moderately slow	High	Slow-medium	Slight -high	Slight (7)	C	.37	Permeability; high compaction susceptibility
Chinook	8	Nearly level -strongly sloping	Deep	Well drained	Fine sandy loam	Fine sandy loam	Moderately rapid	High	Slow-medium	Slight -moderate	Severe (3)	B	.20	Wind erosion hazard
Cowood	15	Moderately steep-very steep	Shallow	Well drained	Gravelly loam	Very gravelly loam over bedrock	Moderate	Very low	Medium	Moderate-high	Non-erosive (8)	C	.32	Depth; rock fragments; available water capacity
Cosberg	8	Nearly level -gently sloping	Deep	Well drained	Fine sandy loam	Fine sandy loam	Moderately rapid	Moderate	Slow	Slight	Severe (3)	B	.20	Wind erosion hazard
Creed	11	Nearly level -moderately sloping	Deep	Well drained	Loam	Clay	Slow	High	Slow-rapid	Slight -high	Moderate (6)	D	.43	Texture; permeability; high compaction susceptibility
Deet	5	Gently sloping-moderately steep	Moderately deep	Well drained	Fine sandy loam	Fine sandy loam over sandstone	Moderately rapid	Low	Slow-medium	Slight -high	Severe (3)	C	.20	Depth; wind erosion hazard
Dalpoint	5	Gently sloping-moderately steep	Moderately deep	Well drained	Loam	Loam over bedrock	Moderately slow	Moderate	Slow-medium	Moderate-high	Severe (4L)	C	.37	Depth; permeability; moderate compaction susceptibility
Dilts	3	Moderately sloping-very steep	Shallow	Well drained	Clay or silty clay	Clay over acid shale	Slow	Very low	Medium -very rapid	Moderate-high	Severe (4)	D	.43	Depth; texture; permeability; high compaction susceptibility
Dismick	7	Nearly level	Deep	Very poorly drained	Clay	Clay	Very slow	High	Slow	Slight	Non-erosive (8)	D	.28	Drainage; texture; permeability; high compaction susceptibility
Dingay	4	Gently sloping-very steep	Shallow	Well drained	Silty clay	Silty clay over shale	Slow	Low	Medium -rapid	Moderate-high	Severe (4L)	C	.37	Depth; texture; permeability; high compaction susceptibility
Doney	5	Moderately sloping-very steep	Moderately deep	Well drained	Loam	Loam over interbedded siltstone & sandstone	Moderate	Moderate	Medium -rapid	Moderate-high	Severe (4L)	C	.37	Depth; water erosion hazard; moderate compaction susceptibility
Dooley	1	Nearly level -strongly sloping	Deep	Well drained	Fine sandy loam	Sandy clay loam over clay loam	Moderately slow	High	Slow-medium	Slight -moderate	Severe (3)	A	.24	Texture; wind erosion hazard
Eliom	2	Nearly level -strongly sloping	Deep	Well drained	Clay loam	Clay-clay loam	Very slow	High	Slow-rapid	Slight -high	Moderate (5)	D	.49	Texture; permeability; high compaction susceptibility
Elve	15	Moderately steep-very steep	Deep	Somewhat excessively drained	Very cobbly loam	Extremely cobbly sandy loam	Moderately rapid	Low	Medium -rapid	High	Non-erosive (8)	B	.20	Rock fragments; available water capacity
Ernm	5	Nearly level -strongly sloping	Shallow	Well drained	Very stony loam	Very stony clay loam over sandstone	Moderately slow	Very low	Slow-rapid	Slight -high	Non-erosive (8)	C	.32	Depth; rock fragments; available water capacity; moderate compaction susceptibility
Ethridge	10	Nearly level -strongly sloping	Deep	Well drained	Silty clay loam	Silty clay -silty clay loam	Moderately slow	High	Slow-rapid	Slight -high	Slight (7)	C	.32	Permeability; high compaction susceptibility

APPENDIX 3.1: CONTINUED

1	2	3	4	5	6		7	8	9	10		11	12	13
Soil Name	Geo-morphic Soil Sub-group	Range in Slope Classes	Soil Depth Favorable to Plant Roots	Natural Drainage Class	Surface Layer	TEXTURE	Permeability of Most Restrictive Layer	Available Water Capacity	Surface Water Runoff	EROSION SUSCEPTIBILITY		Hydrologic Soil Group	Soil Loss Factor (Surface Layer)	Restrictive Soil Factors
						Subsoil or Underlying Material				Water Erosion Rating (WE)	Wind Erodibility Group (WD)			
Evamston	9	Gently sloping-strongly sloping	Deep	Well drained	Loam	Clay loam	Moderate	High	Slow-medium	Slight Moderate-high (6)	6	B	.37	Moderate compaction susceptibility
Farland	9	Nearly level-moderately sloping	Deep	Well drained	Silt loam	Silty clay loam	Moderate	High	Slow-medium	Slight Moderate (6)	6	B	.32	Moderate compaction susceptibility
Farnuf	9	Nearly level-moderately sloping	Deep	Well drained	Loam	Clay loam	Moderate	High	Slow-medium	Slight Moderate (6)	6	B	.32	Moderate compaction susceptibility
Flowerree	9	Nearly level-moderately sloping	Deep	Well drained	Silt loam	Silty clay loam	Moderately slow	High	Slow-medium	Slight Moderate (6)	6	B	.37	Permeability; moderate compaction susceptibility
Gambler	15	Moderately steep-very steep	Deep	Well drained	Gravelly loam	Gravelly and very cobbly clay loam	Moderately rapid	Low	Medium	Moderate-high Non-erosive (8)	8	A	.28	Rock fragments; available water capacity
Gerdum	11	Nearly level-moderately sloping	Deep	Well drained	Clay loam	Clay	Very slow	High	Slow-medium	Slight Moderate (6)	6	D	.43	Clayiness; texture; permeability; high compaction susceptibility
Gesa	6	Nearly level	Deep	Somewhat poorly drained	Silty clay	Silty clay-silty clay loam	Very slow	High	Slow	Slight Severe (4)	4	D	.37	Drainage; permeability; sodic soils; high compaction susceptibility
Glandive	6 17	Nearly level-undulating	Deep	Well drained	Fine sandy loam-loam	Fine sandy loam-sandy loam	Moderately rapid	Moderate	Slow	Slight Severe (3)	3	B	.24	Wind erosion hazard
Grahl	10	Nearly level-gently sloping	Deep	Well drained	Silt loam	Silty clay loam-silty clay	Moderately slow	High	Slow-medium	Slight Moderate (6)	6	C	.37	Permeability; moderate compaction susceptibility
Henly	6	Nearly level-undulating	Deep	Somewhat excessively drained	Loamy fine sand	Loamy sand	Rapid	Low	Very slow	Slight Very severe (2)	2	A	.17	Permeability; available water capacity; wind erosion hazard
Harlan	6	Nearly level	Deep	Well drained	Silty clay loam-silty clay	Silty clay loam-silty clay-loam stratified	Slow	High	Slow	Slight Severe (4L)	4L	C	.37	Permeability; wind erosion hazard; high compaction susceptibility
Havre	6 17	Nearly level	Deep	Well drained	Clay loam-loam	Loam-clay loam-fine sandy loam stratified	Moderate	High	Slow	Slight Severe (4L)	4L	B	.28	Wind erosion hazard; moderate compaction susceptibility
Havreton	6 17	Nearly level	Deep	Well drained	Loam-silt loam	Loam-silty clay loam-fine sandy loam stratified	Moderate	High	Slow	Slight Severe (4L)	4L	B	.28	Wind erosion hazard; moderate compaction susceptibility
Hawksell	8	Nearly level-steep	Deep	Well drained	Fine sandy loam	Fine sandy loam-sandy loam	Moderately rapid	Moderate	Slow	Slight Severe (3)	3	A	.20	Wind erosion hazard
Hedoes	18	Gently sloping-steep	Deep	Well drained	Loam	Loam-sandy loam	Moderate	High	Slow-medium	Slight Moderate-high (5)	5	B	.32	Slope; moderate compaction susceptibility
Hillon	1	Gently sloping-steep	Deep	Well drained	Loam	Loam-clay loam	Moderately slow	High	Slow-rapid	Slight Severe (4L)-high	4L	C	.32	Slope; wind erosion hazard; moderate compaction susceptibility
Judith	9	Nearly level-moderately sloping	Deep	Well drained	Loam-gravelly loam	Clay loam-extremely gravelly sandy loam	Moderate	Low	Slow-medium	Slight Severe (4L)-moderate	4L	B	.32	Available water capacity; wind erosion hazard; moderate compaction susceptibility
Joplin	1	Nearly level-strongly sloping	Deep	Well drained	Loam	Loam-clay loam	Moderate	High	Slow-medium	Slight Moderate (6)	6	C	.37	Moderate compaction susceptibility

APPENDIX 3.1: CONTINUED

1	2	3	4	5	TEXTURE		6	7	8	9	10		11	12	13
Soil Name	Geo-morphic Soil Sub-group	Range in Slope Classes	Soil Depth Favorable to Plant Roots	Natural Drainage Class	Surface Layer	Subsoil or Underlying Material	Permeability of Most Restrictive Layer	Available Water Capacity	Surface Water Runoff	Water Erosion Rating	Wind Erosion Rating	Hydrologic Soil Group	Soil Loss Equation "K" Factor (Surface Layer)	Restrictive Soil Factors	
Julia	3	Gently sloping-moderately steep	Moderately deep	Well drained	Silty clay	Silty clay over shale	Slow	Low	Medium-rapid	Moderate-high	Severe (4)	C	.37	Texture; permeability; water and wind erosion hazard; high compaction susceptibility	
Kevin	1	Nearly level-strongly sloping	Deep	Well drained	Loam	Clay loam-loam	Moderately slow	High	Slow-medium	Slight-moderate	Moderate (6)	C	.32	Permeability; moderate compaction susceptibility	
Kiwanja	6	Nearly level-undulating	Deep	Well drained	Loam	Fine sandy loam-coarse sand	Moderately rapid	Low	Slow	Slight	Moderate (5)	A	.32	Texture; available water capacity; high compaction susceptibility	
Kobar	10	Nearly level-moderately sloping	Deep	Well drained	Silty clay loam	Silty clay loam	Moderately slow	High	Slow-medium	Slight-moderate	Severe (4L)	C	.32	Permeability; wind erosion hazard; high compaction susceptibility	
Korchea	6	Nearly level	Deep	Well drained	Loam-silt loam	Loam-silt loam-fine sandy loam	Moderate	High	Slow	Slight	Severe (4L)	B	.32	Wind erosion hazard; moderate compaction susceptibility	
Korent	6	Nearly level	Deep	Well drained	Loam-silt loam	Loam-silt loam-fine sandy loam stratified	Moderate	High	Slow	Slight	Severe (4L)	B	.32	Wind erosion hazard; moderate compaction susceptibility	
Kremlin	9	Nearly level-moderately sloping	Deep	Well drained	Loam	Loam-clay loam	Moderate	High	Slow-medium	Slight-moderate	Moderate (6)	B	.37	Moderate compaction susceptibility	
Lallie	6	Nearly level	Deep	Poorly drained	Silty clay loam-silty clay	Silty clay	Slow	High	Slow	Slight	Non-erosive (8)	D	.37	Drainage; texture; permeability; strongly alkaline; high compaction susceptibility	
Lambeth	9	Nearly level-steep	Deep	Well drained	Silt loam	Silt loam-silty clay loam	Moderately slow	High	Slow-very rapid	Slight-high	Severe (4L)	C	.43	Slope; permeability; high water and wind erosion hazard; moderate compaction susceptibility	
Lardell	6	Nearly level-gently sloping	Deep	Somewhat poorly drained	Silty clay loam-loam	Silty clay loam-loam	Slow	High	Slow	Slight-moderate	Slight (7)	C	.37	Drainage; permeability; sodic soil; high compaction susceptibility	
Lawther	10	Nearly level-moderately sloping	Deep	Well drained	Silty clay	Silty clay	Slow	High	Slow-medium	Slight-moderate	Severe (4)	D	.43	Texture; permeability; wind erosion hazard; high compaction susceptibility	
Libeg	19	Gently sloping-very steep	Deep	Well drained	Extremely stony loam	Very channery sandy clay loam-very stony sandy loam	Moderate	Low	Slow-medium	Slight-high	Non-erosive (8)	A	.28	Rock fragments; available water capacity	
Lihen	8	Nearly level-gently rolling	Deep	Well drained	Loamy fine sand-fine sandy loam	Loamy fine sand-sandy loam	Rapid	Moderate	Slow	Slight	Very severe (2)	A	.20	Wind erosion hazard	
Linnat	10	Nearly level-moderately sloping	Deep	Well drained	Silty clay loam	Silty clay	Slow	High	Slow-medium	Slight-moderate	Slight (7)	D	.43	Permeability; high compaction susceptibility	
Liam	4	Gently sloping-very steep	Shallow	Well drained	Clay	Clay over shale	Very slow	Very low	Medium-very rapid	Moderate-high	Severe (4)	D	.43	Depth; texture; permeability; available water capacity; high compaction susceptibility	
Lohler	6	Nearly level	Deep	Somewhat poorly drained	Silty clay-silty clay loam	Silty clay	Slow	High	Slow	Slight	Non-erosive (8)	C	.37	Drainage; permeability; high compaction susceptibility	

APPENDIX 3.1: CONTINUED

Soil Name	1	2	3	4	5	6		7	8	9	10		11	12	13
						TEXTURE					EROSION				
		Geo-morphic Soil Sub-group	Range in Slope Classes	Soil Depth Favorable to Plant Roots	Natural Drainage Class	Surface Layer	Subsoil or Underlying Material	Permeability of Most Restrictive Layer	Available Water Capacity	Surface Water Runoff	Water Erosion Rating	Wind Erodibility Group (WEG)	Hydrologic Soil Group	Soil Loss Equation "K" Factor (Surface Layer)	Restrictive Soil Factors
Lolo	15	Nearly level-gently sloping	Deep	Well drained	Gravelly loam	Very gravelly loam	Moderately rapid	Low	Slow	Slight	Moderate (5)	A	.24	Rock fragments; available water capacity	
Lonna	5	Nearly level-moderately steep	Deep	Well drained	Silt loam	Silt loam	Moderate	High	Slow-rapid	Slight-high	Moderate (6)	B	.37	Moderate compaction susceptibility	
Lothair	10	Nearly level-very steep	Deep	Well drained	Silty clay loam	Silty clay loam-silty clay	Slow	High	Slow-very rapid	Slight-high	Severe (4)	C	.32	Permeability; water and wind erosion hazard; high compaction susceptibility	
Macar	9	Moderately sloping-steep	Deep	Well drained	Clay loam	Clay loam-silt loam	Moderate	High	Medium-rapid	Moderate-high	Moderate (6)	B	.32	Slope; water erosion hazard; moderate compaction susceptibility	
Macneal	15	Moderately steep-very steep	Deep	Well drained	Gravelly loam-channery loam	Extremely channery clay loam	Moderately slow	Low	Medium-rapid	Moderate-high	Non-erodive (8)	B	.28	Rock fragments; available water capacity; moderate compaction susceptibility	
Marneath	5	Nearly level-strongly sloping	Moderately deep	Well drained	Loam	Clay loam-loam over bedrock	Moderate	Low	Slow-medium	Slight-high	Moderate (6)	B	.32	Depth; available water capacity; moderate compaction susceptibility	
Marlee	10	Nearly level-moderately sloping	Deep	Well drained	Clay-silty clay	Clay-silty clay	Slow	High	Slow-medium	Slight-moderate	Severe (4)	D	.37	Texture; permeability; wind erosion hazard; high compaction susceptibility	
Martindale	9	Nearly level-strongly sloping	Deep	Well drained	Gravelly loam-loam	Sandy clay loam-loam	Moderate	High	Slow-medium	Slight-moderate	Moderate (5)	B	.32	Moderate compaction susceptibility	
Marvan	10	Nearly level-moderately sloping	Deep	Well drained	Silty clay-loam	Silty clay-loam	Very slow	High	Slow-rapid	Slight-high	Severe (4)	D	.37	Texture; permeability; water and wind erosion hazard; high compaction susceptibility	
McKenzie	7	Nearly level	Deep	Poorly drained	Clay	Clay	Very slow	High	Slow	Slight	Non-erodive (8)	D	.28	Drainage; texture; permeability; high compaction susceptibility	
Neldore	4	Moderately sloping-very steep	Shallow	Well drained	Clay	Clay over acid shale	Slow	Very low	Medium-very rapid	Moderate-high	Severe (4)	D	.43	Depth; high compaction susceptibility; texture; permeability	
Nesda	6	Nearly level-moderately sloping	Deep	Well drained	Gravelly loam-loam	Very gravelly loamy sand	Rapid	Very low	Slow	Slight	Moderate (5)	A	.32	Texture; rock fragments; available water capacity	
Nishon	7	Nearly level	Deep	Somewhat poorly-drained	Clay loam-loam	Clay	Very slow	High	Slow	Slight	Non-erodive (8)	D	.28	Drainage; texture; permeability; high compaction susceptibility	
Nobe	12	Nearly level-moderately steep	Deep	Moderately well-drained	Vesicular crust over clay	Clay	Very slow	High	Slow-rapid	Slight-high	Severe (4)	D	.43	Texture; permeability; only a alkaline soil; high compaction susceptibility	
Norbert	4	Moderately sloping-very steep	Shallow	Well drained	Clay	Clay over shale	Very slow	Very low	Medium-very rapid	Moderate-high	Severe (4)	D	.37	Depth; texture; permeability; available water capacity; high compaction susceptibility	
Parshall	8	Nearly level-moderately sloping	Deep	Well drained	Fine sandy loam	Fine sandy loam	Moderately rapid	High	Slow	Slight-moderate	Severe (3)	B	.20	Wind erosion hazard	
Pandroy	10	Nearly level-strongly sloping	Deep	Well drained	Clay	Clay	Very slow	High	Slow-rapid	Slight-high	Severe (4)	D	.37	Texture; permeability; wind erosion hazard; high compaction susceptibility	
Perna	19	Gently sloping-very steep	Deep	Well drained	Very gravelly loam	Extremely gravelly sandy loam	Moderate	Low	Slow-medium	Slight-high	Non-erodive (8)	A	.32	Rock fragments; available water capacity	

APPENDIX 3.1: CONTINUED

1	2	3	4	5	6		7	8	9	10		11	12	13
Soil Name	Geo-morphic Soil Sub-group	Range in Slope Classes	Soil Depth Favorable to Plant Roots	Natural Drainage Class	Surface Layer	Subsoil or Underlying Material	Permeability of Most Restrictive Layer	Available Water Capacity	Surface Water Runoff	EROSION SUSCEPTIBILITY Water Wind Erosion Erodibility Rating (WEQ)		Hydro-logic Soil Group	Soil Loss Equation "K" Factor (Surface Layer)	Restrictive Soil Factors
Phillips	1	Nearly level -moderately sloping	Deep	Well drained	Loam	Clay-clay loam	Very slow	High	Slow-medium	Slight Moderate (5)	C	.43	Subsoil texture; permeability; high compaction susceptibility	
Redvale	9	Nearly level -gently sloping	Deep	Well drained	Loam	Clay loam over very gravelly loamy sand	Moderately slow	Moderate	Slow-medium	Slight Moderate (6)	C	.37	Very gravely underlying material; moderate compaction susceptibility	
Reeder	5	Nearly level -moderately sloping	Moderately deep	Well drained	Loam	Clay loam over bedrock	Moderate	Moderate	Slow-medium	Slight Moderate (6)	B	.37	Depth; moderate compaction susceptibility	
Rentac	5	Nearly level -steep	Shallow	Well drained	Channery loam	Very channery loam over sandstone	Moderate	Very low	Slow-rapid	Slight Severe (4L)	C	.28	Depth; rock fragments; available water capacity	
Repp	15	Steep-very steep	Deep	Well drained	Gravelly loam	Very gravelly loam	Moderate	Moderate	Medium-rapid	High Non-erosive (8)	A	.24	Slope; rock fragments	
Rickey	10	Nearly level	Deep	Well drained	Silty clay loam	Silty clay loam-silty clay	Slow	High	Slow	Slight Severe (4L)	C	.37	Permeability; wind erosion hazard; high compaction susceptibility	
Riedel	5	Moderately sloping-steep	Moderately deep	Well drained	Fine sandy loam	Fine sandy loam over bedrock	Moderate	Low	Slow-medium	Moderate-high Severe (3)	B	.24	Depth; available water capacity; water and wind erosion hazard	
Rivra	6 17	Nearly level -undulating	Deep	Somewhat excessively drained	Gravelly sandy loam	Very gravelly loamy sand	Very rapid	Very low	Slow	Slight Severe (3)	A	.20	Drainage; rock fragments	
Savage	10	Nearly level -strongly sloping	Deep	Well drained	Silty clay loam	Silty clay-silty clay loam	Slow	High	Slow-rapid	Slight Moderate (7)	C	.32	Permeability; water erosion hazard on slopes; high compaction susceptibility	
Scobey	1	Nearly level -strongly sloping	Deep	Well drained	Loam-clay loam	Clay-clay loam	Moderately slow	High	Slow-rapid	Slight Moderate (6)	C	.32	Permeability; water erosion hazard on slopes; moderate compaction susceptibility	
Shank	10	Nearly level -gently sloping	Deep	Well drained	Silt loam-clay loam	Silty clay -clay	Slow	High	Slow-medium	Slight Moderate (6)	D	.37	Claypan; texture; permeability; high compaction susceptibility	
Shawmut	9	Nearly level -strongly sloping	Deep	Well drained	Gravelly loam-loam	Very gravelly clay loam-extremely gravelly loam	Moderate	Low	Slow-medium	Slight Moderate (5)	B	.32	Rock fragments; available water capacity; moderate compaction susceptibility	
Sicklesteets	15	Moderately steep-very steep	Deep	Well drained	Silty clay loam-cobbly clay loam	Cobbly clay-cobbly clay loam	Moderately slow	High	Rapid-very rapid	High Slight (7)	C	.28	Slope; permeability; water erosion hazard; moderate compaction susceptibility	
Silverchief	15	Strongly sloping-very steep	Deep	Well drained	Loam	Gravelly clay-very gravelly clay loam	Moderately slow	High	Rapid-very rapid	High Moderate (6)	C	.37	Slope; permeability; water erosion hazard; moderate compaction susceptibility	
Straw	9	Nearly level -moderately sloping	Deep	Well drained	Loam-clay loam	Loam-silt loam	Moderate	High	Slow-medium	Slight Moderate (6)	B	.28	Moderate compaction susceptibility	
Sunburst	1	Moderately sloping-steep	Deep	Well drained	Clay loam	Clay loam	Slow	High	Medium-very rapid	Moderate-Severe (4L)	C	.37	Permeability; water and wind erosion hazard; moderate compaction susceptibility	
Tally	8	Nearly level -steep	Deep	Well drained	Fine sandy loam	Fine sandy loam-loamy fine sand	Moderately rapid	High	Slow-medium	Slight Severe (3)	B	.20	Wind erosion hazard	

APPENDIX 3.1: CONTINUED

Soil Name	1	2	3	4	5	TEXTURE		7	8	9	EROSION SUSCEPTIBILITY		10	11	12	13
						Surface Layer	Subsoil or Underlying Material				Water Runoff	Water Erosion Rating				
Teslette		11	Nearly level -moderately sloping	Deep	Well drained	Gravelly loam- vesicular crust -clay	Clay- clay loam	Very slow	High	Slow- rapid	Slight -moderate	Moderate (6)	D		.49	Vesicular crust; claypan; permeability; sodic underlying material; high compaction susceptibility
Teigen		3	Gently sloping- moderately steep	Deep	Well drained	Silty clay loam	Silty clay -clay loam	Slow	High	Medium -rapid	Noder- ate-high	Severe (4)	D		.37	Permeability; water and wind erosion hazard; high compaction susceptibility
Telstad		1	Nearly level -strongly sloping	Deep	Well drained	Loam	Loam- clay loam	Moderate	High	Slow- medium	Slight -moderate	Moderate (6)	B		.32	Moderate compaction susceptibility
Thebo		4	Gently sloping- steep	Moderately deep	Well drained	Clay	Clay over shale	Very slow	Moderate	Medium -very rapid	Noder- ate-high	Severe (4)	D		.37	Depth; texture; permeability; water and wind erosion hazard; high compaction susceptibility
Thoeny		2	Nearly level -moderately sloping	Deep	Well drained	Loam	Clay	Very slow	High	Slow- medium	Slight -moderate	Moderate (6)	D		.49	Claypan; texture; permeability; sodic underlying material; high compaction susceptibility
Tinsley		14	Moderately sloping- steep	Deep	Excessively drained	Gravelly sandy loam	Very gravelly sand	Rapid	Very low	Very slow- medium	Slight -high	Non-erodible (8)	A		.17	Rock fragments; permeability; available water capacity
Trapper		15	Moderately steep- steep	Deep	Well drained	Stony loam	Stony loam	Moderate	High	Medium -rapid	Noder- ate-high	Moderate (6)	B		.32	Slope; rock fragments
Trembles		6	Nearly level -undulating	Deep	Well drained	Fine sandy loam	Fine sandy loam- loamy fine sand	Moderately rapid	Moderate	Slow	Slight -moderate	Severe (3)	B		.20	Wind erosion hazard
Turner		9	Nearly level -moderately sloping	Deep	Well drained	Loam- clay loam	Sandy clay loam- very gravelly loamy sand	Moderate	Low	Slow- medium	Slight -moderate	Moderate (6)	B		.24	Available water capacity; moderate compaction susceptibility
Twilight		5	Gently sloping- moderately steep	Moderately deep	Well drained	Fine sandy loam	Fine sandy loam over bedrock	Moderately rapid	Low	Slow- medium	Slight -high	Severe (3)	B		.24	Depth; available water capacity; wind erosion hazard
Vaada		13	Nearly level -moderately sloping	Deep	Well drained	Silty clay- clay	Silty clay- clay	Very slow	High	Slow- rapid	Slight -high	Severe (4)	D		.24	Texture; vesicular crust; permeability; high compaction susceptibility
Vanda		13	Nearly level -gently sloping	Deep	Well drained	Clay- silty clay	Clay- silty clay	Very slow	High	Slow- rapid	Slight -moderate	Severe (4)	D		.24	Texture; vesicular crust; permeability; strongly alkaline; high compaction susceptibility
Vanstel		9	Nearly level -moderately sloping	Deep	Well drained	Loam- silt loam	Clay loam and silt loam	Moderately slow	High	Slow- medium	Slight -moderate	Moderate (6)	B		.37	Permeability; moderate compaction susceptibility
Vida		1	Gently sloping- moderately steep	Deep	Well drained	Loam- clay loam	Clay loam -loam	Moderately slow	High	Slow- rapid	Slight -high	Moderate (6)	B		.37	Slope; permeability; moderate compaction susceptibility
Wabek		14	Nearly level -strongly sloping	Deep	Excessively drained	Gravelly sandy loam	Extremely gravelly loamy sand	Very rapid	Very low	Very slow- low	Slight -moderate	Severe (3)	A		.24	Rock fragments; available water capacity
Warneke		15	Moderately steep- very steep	Shallow	Well drained	Gravelly loam	Very channery loam	Moderate	Very low	Slow- medium	Slight -high	Severe (4)	D		.32	Depth; rock fragments; available water capacity
Weingart		4	Gently sloping- strongly sloping	Moderately deep	Well drained	Clay loam 1-4 inches thick	Clay over shale	Very low	Low	Slow- rapid	Noder- ate-high	Moderate (6)	D		.43	Depth; permeability; high compaction susceptibility

APPENDIX 3.1: CONTINUED

1 Soil Name	2 Geo-morphic Soil Sub-group	3 Range in Slope Classes	4 Soil Depth Favorable to Plant Roots	5 Natural Drainage Class	6 TEXTURE		7 Permeability of Most Restrictive Layer	8 Available Water Capacity	9 Surface Water Runoff	10 EROSION SUSCEPTIBILITY		11 Hydrologic Soil Group	12 Soil Loss "K" Factor (Surface Layer)	13 Restrictive Soil Factors
					Surface Layer	Subsoil or Underlying Material				Water Erosion Rating (WEG)	Wind Erosion Erodibility Group (WEG)			
Williams	1	Nearly level -strongly sloping	Deep	Well drained	Loam	Clay loam -loam	Moderately slow	High	Slow-medium	Slight Moderate -moderate (6)	ate	B	.32	Permeability; moderate compaction susceptibility
Whitescow	15	Moderately steep-very steep	Deep	Well drained	Gravelly loam-cobbly clay loam	Very gravelly loam -very gravelly clay loam	Moderate	Moderate	Medium-rapid	Moderate-ate-high	(6)	A	.28	Slope; rock fragments; moderate compaction susceptibility
Whitore	15	Strongly sloping-very steep	Deep	Well drained	Cobbly loam-cobbly clay loam	Very cobbly clay loam-extremely cobbly clay loam	Moderate	Moderate	Medium-rapid	Moderate-ate-high	(6)	A	.28	Slope; rock fragments; moderate compaction susceptibility
Windham	14	Gently sloping-very steep	Deep	Well drained	Very gravelly loam	Extremely gravelly loam	Moderate	Low	Slow-rapid	Slight Severe (4L)-high		B	.24	Slope; rock fragments; available water capacity
Work	9	Nearly level -moderately sloping	Deep	Well drained	Clay loam	Clay-clay loam	Moderately slow	High	Slow-rapid	Slight Moderate -high	(6)	C	.32	Permeability; water erosion hazard; moderate compaction susceptibility
Yanac	9	Nearly level -moderately steep	Deep	Well drained	Loam	Loam-gravelly loam	Moderate	High	Slow-rapid	Slight Moderate -high	(6)	B	.32	Slope; water erosion hazard; moderate compaction susceptibility
Yavdin	4	Gently sloping-very steep	Shallow	Well drained	Silty clay	Silty clay over shale	Slow	Low	Medium-rapid	Moderate-Severe (4L)-high		D	.37	Depth; texture; permeability; high compaction susceptibility
Yetull	8	Nearly level -moderately steep	Deep	Somewhat excessively drained	Loamy sand	Sand and loamy sand	Rapid	Low	Very slow-slow	Slight Very moderate-severe (2)		A	.15	Permeability; available water capacity
Zahill	1	Gently sloping-very steep	Deep	Well drained	Loam	Loam-clay loam	Moderately slow	High	Slow-rapid	Moderate-ate-high	(6)	C	.32	Slope; permeability; water erosion hazard; moderate compaction susceptibility
Zahl	1	Gently sloping-very steep	Deep	Well drained	Loam	Loam-clay loam	Moderately slow	High	Slow-rapid	Moderate-ate-high	(6)	C	.32	Slope; permeability; water erosion hazard; moderate compaction susceptibility

Soil Subgroup and Soil Names	Percent of Public Land	Vegetation Type	Key Species	Increasers	Response to Grazing Management	Suitability for Mechanical Treatments	Other Suitable Land Treatments	Other
1. Loamy glacial till upland plains; series are Bearpaw, Dooley, Hilton, Joplin, Kevin, Phillips, Scobey, Sunburst, Teletad, Vida, Williams, Zahl, Zahill	39.3	Grassland (short and midgrasses)	Western and thickspike wheatgrasses	Needleandthread; blue grama, clubmoss, fringed sagewort	Slow, due to clubmoss and blue grama	Well suited on slopes less than 12%	Fertilization, prescribed burning; recommended on crested wheatgrass	Local areas have 5 to 25% surface stones which influence suitability for mechanical treatments
2. Claypan and dense clay glacial till uplands; series are Elloam, Tealatte, Theony	20.4	Grassland-sagebrush; (short and midgrasses)	Western and thickspike wheatgrasses	Blue grama, clubmoss, fringed sagewort, cactus, big sagebrush	Very slow due to claypan in subsurface; dense clay, clubmoss and blue grama	Well suited on slopes less than 8%. Depth of treatment should be 6-10"	Same as above	Local areas may have more than 25% of the surface area covered with stones.
3. Clayey acid shale uplands; series are Ditta, Julin, Teigen	12.3	Grassland-sagebrush-juniper (midgrasses predominate)	Prairie sandreed, little bluestem, western and thickspike wheatgrasses	Sagebrush, creeping juniper	Responds quickly due to granular surface and high shrink-swell which provides seedbed	Not suited	--	Severely erosive
4. Calcareous or bentonitic shale uplands; series are Abor, Bascovy, Dinyaw, Lisan, Norbert, Neldore, Thebo, Weingart, Yavdim	10	Grassland-sagebrush (midgrasses predominate)	Western and thickspike wheatgrasses, green needlegrass	Big sagebrush	Same as above	Not suited	--	--
5. Loamy sedimentary uplands; series are Cabba, Cabhart, Cambert, Dast, Delpoint, Doney, Ermon, Lonna, Marmarth, Reeder, Rentsac, Riedel, Twilight	2.4	Grassland (short and midgrasses)	Western and thickspike wheatgrasses, bluebunch wheatgrass	Blue grama, clubmoss, cactus, fringed sagewort	Slow due to clubmoss and blue grama, except on Riedel, Twilight and Dast soils	Cambert, Delpoint, Doney, Lonna, Marmarth and Reeder soils are well suited on slopes less than 8%	Fertilization, prescribed burning (recommended on crested wheatgrass)	--
6. Loamy and clayey floodplains; series are Bowdoin, Gess, Glendive, Hanly, Harlem, Havre, Havrelon, Kiwanis, Korchee, Korent, Lallie, Lardell, Lohler, Needs, Rivra, Trembles, Typic Fluvaquents, Typic Ustifluvents, Aquic Ustifluvents, Fluvaquentic Haploboralls, Ustic Torrifluvents	2.9	Grassland and grassable woodland	Western wheatgrass, green needlegrass, silver sagebrush, willow, cottonwood	Silver sagebrush, wildrose, snowberry, blue grama, cactus, noxious weeds	Responds quickly due to granular surface and overflow and subirrigated moisture. Livestock concentrate in these areas for water, shade and rubbing	On-site determination needed due to erosion problems	--	--
7. Potholes and level basins subject to ponding; series are Dimmick, McKenzie, Nishon	.7	Riparian, grassland, midgrasses, sedges, rushes and willows	Willows, western wheatgrass, green needlegrass, sedges, and rushes	Foxtail barley, curled dock	Similar to above	Suited for pit retention reservoirs	--	--
8. Moderately coarse and coarse textured soils on terraces, foot-slopes and fans; series are Assiniboine, Blanchard, Busby, Chinook, Corberg, Hawkseil, Lihen, Parrshall, Tally, Vetull	.6	Grassland (midgrasses predominate)	Prairie sandreed, little bluestem, plains muhly	Needleandthread, sedges, green sagewort, yucca, blue grama	Responds quickly	Assiniboine, Busby, Chinook, Corberg, Parrshall, Tally are suited on slopes less than 8%	--	Severe wind erosion hazard; life of mechanical treatments is less than on loamy soils

Soil Subgroup and Soil Names	Percent of Public Land	Vegetation Type	Key Species	Increases	Response to Grazing Management	Suitability for Mechanical Treatments	Other Suitable Land Treatments	Other
9. Medium textured soils on terraces, footslopes and fans; series are Attewan, Benz, Bitton, Brockway, Evanston, Fairland, Farnuf, Flowere, Judith, Kremlin, Lambeth, Macar, Martinsdale, Redvale, Shesmut, Straw, Turner, Vanstel, Work and Yamac	1.9	Grassland and sagebrush	Western and thickspike wheatgrasses	Needleandthread, blue grama, clubmoss, fringed sage-wort, cactus	Slow, due to clubmoss and blue grama, and loca-tion near flood-plains	Well suited on slopes less than 8% (except Rit-ton, which is too stony)	Fertilisation, prescribed burn-ing (recom-mended wheat-grass)	Bene soil is strongly alk-aline with greasewood and saltgrass as part of the vegeta-tion
10. Fine textured soils on terraces, footslopes and fans; series are Accl, Cherry, Ehridge, Grail, Kober, Lawther, Linnet, Lothair, Marias, Marvan, Pendroy, Richey, Savage, Shask	2.7	Grassland-sagebrush (midgrasses predominate)	Western and thickspike wheatgrasses, green needle-grass	Big sagebrush	Lawther, Marias, Marvan and Pend-roy respond rapidly due to granular surface and high shrink-swell which provides a seedbed, other series are slow due to clubmoss and blue grama	All series except Lawthar, Marias, Marvan and Pend-roy are well suited on slopes less than 8%	Sagebrush control	--
11. Claypan and dense clay soils on terraces, footslopes and fans; series are Creed, Gerdum, Tealette	1.4	Grassland-sagebrush (short and midgrasses)	Western and thickspike wheatgrasses	Big sagebrush, blue grama, clubmoss, cactus, wooly indianwheat	Very slow due to claypans, dense clay, clubmoss and blue grama	Well suited on slopes up to 8%; depth of treatment should be 6-10"	--	--
12. Subirrigated and saline clay-pans on terraces and fans; series are Absher, Adger and Nobe	1.6	Greasewood-grassland-sagebrush	Nuttall, alkali grass, alkali seca-ton, western wheatgrass, inland salt-grass	Big sagebrush, foxtail barley, glasswort	Moderate	Not recommended due to economics	--	--
13. Very slowly permeable soils of terraces and fans, series are Vanda, Vesda	3.1	Grassland-sagebrush	Western and thickspike wheatgrasses, green needle-grass, Nut-tall saltbush	Big sagebrush, cactus, sandberg bluegrass, fox-tail barley	Extremely slow	Not recommended due to economics and erosion hazards	--	--
14. Very gravelly, extremely gravelly and cobbly soils on terraces and fans; series are Beaverell, Beaverton, Tins-ley, Wabek, Windham	.3	Grassland	Western and thickspike wheatgrass, plains muhly	Needleandthread, sedges, silver sagebrush, cactus, rabbitbrush, blue grama	Slow due to low moisture storage capacity	Not suited	--	--
15. Loamy and clayey soils in mountains with forest canopy; series are Arcette, Belsain, Covood, Elve, Gambler, Lolo, Macneel, Nepp, Sicklsteates, Silverchief, Trapper, Warneke, Whitcow, Whitore	.1	Coniferous woodland	Bluebunch wheatgrass, rough fescue, columbia needlegrass	Idaho fescue	Moderate	Not suited	--	--
16. Clay shale uplands with forest canopy cover; series are Bes-cory, Dilie, Julin, Neldore	*	Ponderosa pine -grassland	Western and thickspike wheatgrasses, green needle-grass, prairie sandreed, little blue-stem	Ponderosa pine, creeping jun-iper, big sage-brush	Rapid-refe-r to 3 and 4	Not suited	Prescribed burning and management of wildfire	Severely erosive

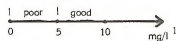
Soil Subgroup and Soil Names	Percent of Public Land	Vegetation Type	Key Species	Increases	Response to Grazing Management	Suitability for Mechanical Treatments	Other Suitable Land Treatments	Other
17. Loamy and clayey floodplains with more than 10% canopy cover of deciduous trees; soils are the same as subgroup 6	*	Deciduous woodland	Willows, cottonwood, western and thickspike wheatgrasses, green needlegrass	Norxious weeds, wildrose, snowberry, cactus	Same as 6	Not suited	--	--
18. Loamy and clayey soils on fans and foot-slopes of mountains and foot-hills; series are Belain, Redoes, Lolo	.1	Mountain grassland	Bluebunch wheatgrass, rough fescue, Richardson needlegrass	Idaho fescue, big sagebrush, shrubby cinquefoil	Moderate	Belain, Redoes, and Lolo soils are suited on slopes less than 8%	--	--
19. Loamy and loamy-skeletal soils on bedrock ridges and on footslopes of mountains; series are Castner, Cheadle, Libeg, Perma, Warncke	.2	Coniferous woodland	Same as above	Idaho fescue, arrowleaf balsamroot	Slow	Not suited	--	--

* Subgroups 16 and 17 were not mapped out and acreages are not available; 16 is included in subgroups 3 and 4, 17 is included in subgroup 6 on the general soils map and Table 3.7.

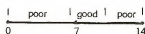
APPENDIX 3.3: WATER QUALITY STANDARDS

AQUATIC BIOTA

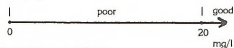
Dissolved Oxygen:



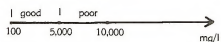
pH:



Alkalinity:



Total Dissolved Solids:

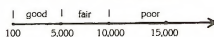


Livestock and Wildlife Use

Salts of Sodium and Calcium ²:



Salts of Potassium and Magnesium ²:



¹ milligrams per litre

² combined with bicarbonates, chlorides, sulfates

Source: Quality Control for Water, U.S. Environmental Protection Agency, Washington, D.C. 1976.

APPENDIX 3.4: RANGE SITE DATA

Soil Subgroup	Range Sites, Soil Name and Precipitation Zone	Potential Production (Lbs/Ac, Dry Weight)			Potential Native Plant Community Common Plant Name and Percent Composition by Weight	Livestock Grazing Response		Invader Plants
		Favorable Year	Normal Year	Unfavorable Year		Cattle	Sheep	
	<u>WET MEADOWS 10-14"</u>	6000	5500	4000	<u>Grasses and Grasslike</u>			
7	Dimick				Tall reedgrasses	20-40	D	I
6	Typic Fluvaquents				American soughgrass	5-10	D	I
6	Harlem clay, wet				Northern manna grass	0-5	D	I
					Prairie cordgrass	0-5	D	I
					Tufted hairgrass	10-15	I	I
					Bearded wheatgrass	5-10	D	D
					Other sedges and rushes	10-20	I	I
					Other perennial grasses	5-15	I/D	I/D
					<u>Forbs</u>			
					Goldenpess		I	I
					Bogorchid		---	---
					Blue-eyed grass	5-10	I	I
					Water parsnip		I	I
					Waterhenlock		I	I
					Other perennial forbs		I	I
					<u>Woody Species</u>			
					Willow		D	D
					Cottonwood	10-20	---	---
	<u>SUBIRRIGATED 10-14"</u>	5000	4000	3000	<u>Grasses and Grasslike</u>			
6	Farnuf, wet				Prairie cordgrass	10-30	D	I
6	Harlem, wet				Big bluestem	5-10	D	D
6	Parshall, wet				Western wheatgrass	10-20	I	I
6	Turner, wet				Reedgrasses	5-15	D	I
6	Fluvaquentic Haploborolls				Tufted hairgrass	5-15	I	I
					Mat muhly	5-15	I	I
					Slender wheatgrass	5-15	D	I
					Other perennial grasses	0-15	I/D	I/D
					Sedges and rushes	5-15	I/D	I/D
					<u>Forbs</u>			
					Perennial sunflower		D	D
					Rocky Mountain gayfeather		D	D
					American vetch		D	D
					Blue-eyed grass	0-5	D	D
					Goldenpess		D	D
					Cinquefoil spp.		D	D
					<u>Woody Species</u>			
					Willow		D	D
					Chokeberry		D	D
					Buffaloberry		I	I
					Box elder	5-15	---	---
					Cottonwood		---	---
					Silverberry		I	I
					Snowberry		I	I
					Rose spp.		I	I
	<u>SALINE LOWLAND 10-14"</u>				<u>Grasses and Grasslike</u>			
	Phase 1	2500	2000	1200	Alkali sacaton	20-30	D	D
6	Harlem, saline				Alkaligrass	20-30	D	D
6	Havre, saline				Alkali cordgrass	10-20	D	I
6	Lalite, saline				Western wheatgrass	10-20	D	D
6	Lerdell				Basin wildrye	5-15	D	I
6	Aquic Ustifluvents, saline				Inland saltgrass	5-10	I	I
6	Fluvaquents, saline				Alkali bluegrass	5-10	D	D
6	Ustifluvents, saline				Sedge and rushes	5-15	I	I
					Other perennial grasses	5-15	I/D	I/D
	Phase 2	800	600	400	<u>Forbs</u>			
6	Mobe, flooded				Seepweed		I	I
					Knottweed	0-5	I	I
					Other perennial forbs		I	I
	Phase 1 and 2 have similar plant communities but vary in production.				<u>Woody Species</u>			
					Greasewood		I/D	I
					Buffaloberry	5-15	---	---
					Muttall saltbush		D	D

Soil Subgroup	Range Sites By Soil Groups and Precipitation Zone	Potential Production (Lbs/Ac, Dry Weight)			Potential Native Plant Community Common Plant Name and Percent Composition by Weight	Livestock Grazing Response		Invader Plants	
		Favorable Year	Normal Year	Unfavorable Year		Cattle	Sheep		
	OVERFLOW 10-14"				Grasses and Grasslike				
	Phase 1	3200	2700	2000	Basin wildrye	20-40	D	D	Kentucky bluegrass
6	Glendive				Green needlegrass	15-30	D	D	Canada bluegrass
6	Harlem				Western wheatgrass	15-30	D	D	Thistle
6	Havre				Slender wheatgrass	5-10	D	D	Annuals
6	Ustic Torrifluvents				Canby bluegrass	5-10	D	D	Leafy spurge
6	Trembles				Needleandthread	0-10	I	I	Other weedy forbs
6	Havrelon				Other perennial grasses	5-15	I/D	I/D	
6	Lohler								
6	Typic Ustifluvents				Forbs				
	Phase 2	3000	2200	1500	American vetch		D	D	
	Bowdoin				Two grooved milk vetch		D	D	
6	Marias, wet				Perennial sunflower	0-5	D	D	
6	Marvan, wet				Dotted gayfeather		D	D	
					Other perennial forbs	I/D	I/D		
	Phase 3	3100	2600	2200	Western yarrow		I	I	
	Lallie				Lomatium spp.		I	I	
6	McKenzie				Fringed sagewort	0-5	I	I	
7	Wahon				Scurfpea		I	I	
	Phases 1, 2 and 3 have similar plant communities but vary in production				Woody Species				
					Snowberry		I	I	
					Rose spp.		I	I	
					Chokecherry	5-10	D	D	
					Silver sagebrush		I	D	
					Serviceberry		D	D	
	SANDS 10-14"				Grasses and Grasslike				
	Phase 1	1800	2200	1800	Prairie Sandreed	40-60	D	I	Red threawn
8	Blanchard				Little bluestem	10-15	D	I	Annuals
8	Hanly				Sand bluestem	0-20	D	D	Weedy forbs
	Phase 2	2600	2200	1800	Indian ricegrass	10-20	D	D	
8	Lihen				Needleandthread	10-20	I	I	
	12-14" precipitation zone; plant community is similar, productivity is higher than Phase 1				Sand dropseed	0-5	I	I	
					Blue grama	0-5	I	I	
					Other perennial grasses	5-15	I/D	I/D	
					Threadleaf sedge	0-5	I	I	
					Forbs				
					Prairieclover		D	D	
					Dotted gayfeather		D	D	
					Scurfpea		I	I	
					Eriogonum		I	D	
					Milkvetch	5-10	I/D	I/D	
					White milkwort		I	I	
					Hairy goldenaster		I	I	
					Fringed sagewort		I	I	
					Green sagewort		I	I	
					Other perennial forbs	I/D	I/D		
					Woody Species				
					Yucca		I	I	
					Rose spp.	0-5	I	I	
	SANDY 10-14"				Grasses and Grasslike				
	Phase 1	2000	1600	1000	Prairie sandreed	20-30	D	I	Annual bromes
8	Assiniboine				Little bluestem	5-15	D	I	Tumblegrass
8	Busby				Sand bluestem	0-5	D	D	Bull thistle
8	Chinook				Indian ricegrass	5-20	D	D	Canada thistle
8	Coxburg				Western wheatgrass	10-20	I	I	Knapweeds
8	Dooley				Needleandthread	15-25	I	I	Leafy spurge
6	Glendive				Blue grama	0-5	I	I	Salsify
6	Trembles				Other perennial grasses	5-15	I/D	I/D	Curlycup gumweed
5	Twilight				Threadleaf sedge	5-10	I	I	Sandwort
9	Turner								Pricklypear
8	Tally				Forbs				
	Phase 2	2600	2200	1800	Prairieclover		D	D	
8	Lihen				Dotted gayfeather		D	D	
8	Marshall				American licorice		I	I	
					Hairy goldenaster	0-10	I	I	
					Fringed sagewort		I	I	
	Phase 3	1200	1000	800	Scurfpea		I	I	
5	Riedel				Penstemon		I	D	
	Phases 1, 2, and 3 have similar plant communities but vary in production.				Other perennial forbs	I/D	I/D		
					Woody Species				
					Yucca		I	I	
					Skunkbush sumac		---	---	
					Rose spp.	0-5	I	I	
					Other perennial shrubs	I/D	I/D	I/D	

APPENDIX 3.4: CONTINUED

Soil Subgroup	Range Sites By Soil Groups and Precipitation Zone	Potential Production (Lbs/Ac, Dry Weight)			Potential Native Plant Community Common Plant Name and Percent Composition by Weight	Livestock Grazing Response		Invader Plants	
		Favorable Year	Normal Year	Unfavorable Year		Cattle	Sheep		
	<u>SILTY 10-14"</u>								
	Phase 1	2300	1900	1300	<u>Grasses and Grasslike</u>				
10	Cherry				Western wheatgrass	30-50	D	D	Tumblegrass
9	Farland				Bluebunch wheatgrass	0-40	D	D	Pricklypear
5	Harmarth				Green needlegrass	15-30	D	D	Knapweeds
5	Reader				Needleandthread	15-20	I	I	Bull thistle
10	Shaak				Little bluestem	5-20	D	I	Canada thistle
					Porcupine grass	5-15	D	I	Leafy spurge
	Phase 2	1500	1100	800	Prairie Junegrass		I	I	Salsify
9	Attewan				Blue grama		I	I	Curlycup gumweed
5	Cambert				Sandberg bluegrass	5-10	I	I	Sandwort
5	Delpoint				Threadleaf sedge		I	I	Small clubmoss
5	Doney				Other perennial grasses	5-15	I/D	I/D	Broom snakeweed
9	Evanston								Crested wheatgrass
9	Farnuf				<u>Forbs</u>				
9	Flowerree				American vetch		D	D	
6	Glendive loan				Dotted gayfeather	5-10	D	D	
6	Havre				Black sampson		D	D	
18	Hedoes				Western yarrow		I	I	
1	Joplin				Fringed sagewort		I	I	
1	Kevin				Hairy goldenaster	0-05	I	I	
6	Korent				White milkwort		I	I	
9	Kremfin				Scurfpea		I	I	
5	Lonna								
1	Phillips				<u>Shrubs</u>				
9	Redvale				Silver sagebrush		I	D	
1	Scobey				Winterfat	0-05	D	D	
1	Telstad				Nuttall saltbush		D	D	
9	Yamac								
1	Zahill								
1	Zahl								
	Phase 3	1200	900	500					
	Slopes								
1	Hillon 15%								
1	Lambeth 15%								

Phase 1, 2 and 3 have similar plant communities but vary in production.

	<u>SILTY 15-19"</u>			
	Phase 4	2400	1900	1500
1	Beaspaw			
18	Bolsin			
9	Judith			
19	Libeg			
9	Martinsdale			
19	Perna			
9	Shawmut			
9	Straw			
9	Turner			
1	Vida			
1	Williams			
9	Wick			

15-19" precipitation zone; plant community is similar, productivity is higher than Phase 1, 2 and 3.

APPENDIX 3.4: CONTINUED

Soil Subgroup	Range Sites By Soil Groups and Precipitation Zone	Potential Production (Lbs/Ac, Dry Weight)			Potential Native Plant Community Common Plant Name and Percent Composition by Weight	Livestock Grazing Response		Invader Plants	
		Favorable Year	Normal Year	Unfavorable Year		Cattle	Sheep		
	CLAYEY 10-14"				Grasses and Grasslike				
	Phase 1	1800	1300	900	Bluebunch wheatgrass	0-40**	D	D	Yellow sweetclover
6	Harlem silty clay loam				Western wheatgrass	30-50	D	D	Fringed sagewort
6	Havre silty clay loam				Thickspike wheatgrass	30-50	D	D	Broom snakeweed
6	Ustic Torriorthents				Green needlegrass	30-50	D	D	Annuals
					Plains reedgrass	0-5	I	I	Weedy forbs
					Prairie junegrass	0-5	I	I	
					Blue grama	0-5	I	I	
					Sandberg bluegrass	0-5	I	I	
					Other perennial grasses	5-10	I	I	
					Needleleaf sedge	0-5	I	I	
					Forbs				
					American vetch		D	D	
					Two grooved milkvetch		I	I	
					Outleaf goldweed		I	I	
					Scarlet globemallow		I	I	
					Fringed sagewort	5-10	I	I	
					White milkwort		I	I	
					Scurfpea		I	I	
					Pussytoes		I	I	
					Shrubs				
					Silver sagebrush		I	I	
					Winterfat		D	D	
					Rabbitbrush	0-5	---	---	
					Other shrubs		I	I	
					** Western part of study area.				
	Phase 2	1400	1100	800	Phase 2 same as Phase 1 except:				
10	Ethridge				Blue grama	5-10	I	I	Small clubmoss
10	Kobar				Needleandthread	5-10	I	I	
10	Richey				Green needlegrass	25-40	D	D	
	Phase 3	1400	1100	800	Phase 3 same as Phase 1 except:				
4	Aber				Western and thickspike wheatgrass	40-60	D	D	
4	Bascovy				Big sagebrush	5-10	I	I	
10	Marfas				Other shrubs	0-5	I/D	I/D	
10	Marvan								
10	Pendroy								
4	Thebo								
	CLAYEY 15-19"								
	Phase 4	2400	2000	1600					
10	Graff								
10	Savage								
	15-19" precipitation zone; plant communities are similar, productivity is higher than Phase 1, 2 and 3.								
	CLAYEY 10-14"				Grasses and Grasslike				
	Phase 5	1000	750	450	Western wheatgrass	15-30	D	D	Goldenpea
3	Julia				Thickspike wheatgrass		D	D	Annuals
3	Teigen				Prairie sandreed	20-40	D	D	Weedy forbs
					Little bluestem	20-50	D	D	
					Green needlegrass	20-50	D	D	
					Bluebunch wheatgrass	10-20	D	D	
					Sandberg bluegrass	0-5	I	I	
					Plains reedgrass	0-5	I	I	
					Prairie junegrass	0-5	I	I	
					Sun sedge	0-5	I	I	
					Forbs				
					Lomatium spp.		D	D	
					Prairie clover		D	D	
					American vetch	5-10	D	D	
					Breadroot scurfpea		D	D	
					Goldenrod		I	I	
					Woody Species				
					Creeping juniper		I	I	
					Common juniper		I	I	
					Rose spp.	5-10	I	I	
					Big sagebrush		I	I	
					Rocky Mountain juniper		I	I	

APPENDIX 3.4: CONTINUED

Soil Subgroup	Range Sites By Soil Groups and Precipitation Zone	Potential Production (Lbs/Ac, Dry Weight)			Potential Native Plant Community Common Plant Name and Percent Composition by Weight	Livestock Grazing Response		Invader Plants	
		Favorable Year	Normal Year	Unfavorable Year		Cattle	Sheep		
5	<u>THIN SANDY</u> 10-14" Riedel	1300	1000	500	<u>Grasses and Grasslike</u>				
					Plains muhly	0-10	D	D	Red threavm
					Little bluestem	15-30	D	D	Fringed sagewort
					Prairie sandreed	10-20	D	D	Broom snakeweed
					Needleandthread	15-30	I	I	Annuals
					Threadleaf sedge	5-10	I	I	Weedy forbs
					Indian ricegrass	0-5	D	D	
					Western wheatgrass	15-30	D	D	
					Blue grama	5	I	I	
					Prairie junegrass	5	I	I	
					American vetch	0-5	D	D	
					Prairie clover		D	D	
					Green sageswort		I	I	
					Yucca	0-5	I	I	
					Other perennial forbs		I/D	I/D	
					<u>Shrubs</u>				
					Rose Spp.		I	I	
					Skunkbush sumac	5-10	I	D	
					Other perennial shrubs		I/D	I/D	
5	<u>THIN SILTY</u> 10-14" Slopes	1200	800	500	<u>Grasses and Grasslike</u>				
					Bluebunch wheatgrass	0-60	D	D	Red threavm
					Western & thickspike	20-60	D	D	Fringed sagewort
					wheatgrass				Broom snakeweed
					Green needlegrass	5-10	D	D	Annuals
					Little bluestem	5-10	D	D	Weedy forbs
					Plains muhly	5-10	D	D	Yellow sweetclover
					Needleandthread	10-20	I	I	
					Blue grama	0-5	I	I	
					Prairie junegrass	0-5	I	I	
					Plains reedgrass	0-5	I	I	
					Threadleaf sedge	0-5	I	I	
					Other perennial grasses	5-10	I/D	I/D	
					<u>Forbs</u>				
					American vetch	0-5	D	D	
					Prairie clover		D	D	
					Dotted gayfeather		D	D	
					Goldenpea		I	I	
					Milkvetches	0-5	I/D	I/D	
					Eriogonum spp.		I	D	
					Phlox		I	I	
					Yucca		I	I	
1	<u>THIN CLAYEY</u> 10-14" Phase I Sunburst	1200	850	600	<u>Grasses and Grasslike</u>				
					Bluebunch wheatgrass**	0-60	D	D	Yellow sweetclover
					Western & thickspike	20-60	D	D	Fringed sagewort
					wheatgrass				Broom snakeweed
					Green needlegras	10-40	D	D	Annuals
					Little bluestem	10-20	D	D	Weedy forbs
					Sideoats grama	5-10	D	D	
					Plains muhly	0-10	D	D	
					Blue grama		I	I	
					Prairie junegrass	5-10	I	I	
					Plains reedgrass		I	I	
					Other perennial grasses and sedges	5-10	I/D	I/D	
					<u>Forbs</u>				
					American vetch	0-5	D	D	
					Prairie clover		D	D	
					Dotted gayfeather		D	D	
					Goldenpea		I	I	
					Milkvetches	0-5	I/D	I/D	
					Eriogonum spp.		I	D	
					Phlox		I	I	
	<u>Woody Species</u>								
	Winterfat		D	D					
	Rose Spp.	5-10	I	I					
	Creeping juniper		I	I					
	Big sagebrush	0-5	I	I					

** Western part of study area.

APPENDIX 3.4: CONTINUED

Soil Subgroup	Range Sites By Soil Groups and Precipitation Zone	Potential Production (Lbs/Ac, Dry Weight)			Potential Native Plant Community Common Plant Name and Percent Composition by Weight	Livestock Grazing Response		Invader Plants
		Favorable Year	Normal Year	Unfavorable Year		Cattle	Sheep	
4	<u>SHALLOW CLAY</u> 10-14"	700	500	300	<u>Grasses and Grasslike</u>			
4	Lism				Western wheatgrass	20-40	D	Broom snakeweed
4	Neldore				Green needlegrass	20-40	D	Annuals
					Bluebunch wheatgrass	30-50	I	Weedy forbs
					Sandberg bluegrass	I	I	Yellow sweetclover
					Plains reedgrass	0-15	I	
					Prairie junegrass	I	I	
					Blue grama	I	I	
					Other perennial grasses	5-10	I/D	I/D
					Needleleaf sedge	0-5	I	I
					Prairie sandreed (coarse clay)	10-20	D	D
					Little bluestem (coarse clay)	15-30	D	D
3	<u>COARSE CLAY</u> 10-14"	700	500	300	<u>Forbs</u>			
	Dilts				American vetch	D	D	
					Prairie clover	I	I	
					Union	I	I	
					Scarlet globemullin	5-10	I	I
					Biscuitroot	I	I	
					Goldenpea	I	I	
					Other forbs	I	I	
4	<u>SHALLOW CLAY</u> 15-19"	1800	1400	1000	<u>Woody Species</u>			
	Norbert				Winterfat	D	D	
					Nuttall saltbush	D	D	
					Big sagebrush	5-10	I	I
					Creeping juniper	I	I	
					Rose spp. (coarse clay)*	I	I	
	<u>SHALLOW TO GRAVEL</u> 15-19"				<u>Grasses and Grasslike</u>			
14	Phase 1	1000	700	500	Western wheatgrass	10-25	D	D
14	Beaverton				Bunch wheatgrass	0-60	D	D
14	Rivra				Needleandthread	15-30	I	I
6	Wabok				Sideoats grama	0-20	D	D
14	Windham				Prairie junegrass	5-10	I	I
					Little bluestem	5-15	D	D
					Plains muhly	10-20	D	I
					Red threeawn	0-5	I	I
					Blue grama	0-5	I	I
					Other perennial grasses	5-15	I/D	I/D
					Threadleaf sedge	0-5	I	I
					<u>Forbs</u>			
					Prairie clover	I	I	
					Scurfpea	I	I	
					Penstemon	I	D	
6	Phase 2	2200	2000	1800	Milkvetch	5-10	I/D	I/D
	Meads				Fringed sagewort	I	I	
					Other forbs	I/D	I/D	
					<u>Shrubs</u>			
					Rose spp.	I	I	
					Skunkbush sumac	I	D	
					Pricklypear	I	I	
					Other shrubs	I	I	
5	<u>SHALLOW</u> 10-14"	900	650	400	<u>Grasses and Grasslike</u>			
5	Cabba				Bluebunch wheatgrass	0-50*	D	D
5	Cabbart				Western wheatgrass	10-30	D	I
					Needleandthread	10-20	I	I
					Little bluestem	0-20	D	I
					Plains muhly	5-15	D	D
					Prairie junegrass	0-5	I	I
					Blue grama	0-5	I	I
					Red threeawn	0-5	I	I
					Other perennial grasses	5-15	I	I
					<u>Forbs</u>			
					Prairie clover	D	D	
					Dotted gayfeather	D	D	
					Fringed sagewort	0-5	I	I
					Union	I	I	
					Astragalus spp.	I/D	I/D	
					Other perennial forbs	I	I	
					<u>Shrubs</u>			
					Skunkbush sumac	I	D	
					Winterfat	D	D	
					Creeping juniper	10-25	I	I
					Other shrubs	I	I	

APPENDIX 3.4: CONTINUED

Soil Subgroup	Range Sites By Soil Groups and Precipitation Zone	Potential Production (lbs/Ac, Dry Weight)			Potential Native Plant Community Common Plant Name and Percent Composition by Weight	Livestock Grazing Response		Invader Plants	
		Favorable Year	Normal Year	Unfavorable Year		Cattle	Sheep		
	<u>SHALLOW 15-19"</u>								
	Phase 2	1200	1000	800	<u>Grasses and Grasslike</u>				
19	Castner				Bluebunch wheatgrass	65-85	D	I	Cheatgrass
19	Cheadle				Idaho fescue	0-15	D	I	Red threawn
19	Warneke				Needleandthread	0-10	I	I	Leafy spurge
					Western wheatgrass	0-5	I	I	
					Sedges	0-5	I	I	
					Other native perennial grasses.	10-15	I	I	
					<u>Forbs</u>				
					Penstemon		I	I	
					Hairy Goldenaster		I	I	
					Phlox		I	I	
					Eriogonum	5-15	I	D	
					Pussytoes		I	I	
					Other native perennial forbs.		I/D	I/D	
					<u>Woody Species</u>				
					Conifers		---	---	
					Serviceberry	15-30	D	D	
					Other native shrubs		I/D	I/D	
	<u>CLAY PAN 10-14"</u>								
	Phase 1	1000	900	800	<u>Grasses and Grasslike</u>				
12	Absher				Nuttall alkaligrass	20-40	D	D	Knotweed
12	Adger				Alkali salsola	20-40	D	D	Pricklypear
					Inland saltgrass	10-25	I	I	Tumblegrass
					Western and thickspike wheatgrass.	20-40	D	D	Annuals
					Quick bluegrass	0-5	I	I	
					Other perennial grasses	5-10	I/D	I/D	
					<u>Forbs</u>				
					Poverty sunpeweed		I	I	
					Seepweed	0-5	I	I	
					Clasewort		I	I	
					Other forbs		I	I	
					<u>Woody Species</u>				
					Greasewood		I/D	I/D	
					Nuttall saltbush	0-5	D	D	
					Other woody species		I/D	I/D	
					<u>Grasses and Grasslike</u>				
2	Phase 2	900	650	500	Western and thickspike wheatgrass.	30-50	D	D	Prickley pear
11	Thoeny				Green needlegrass	5-10	D	D	Sixweeks fescue
	Creed				Needleandthread	5-20	I	I	Tumblegrass
					Blue grama	5-10	I	I	Broom snakeweed
					Sandberg bluegrass	0-5	I	I	Clubmoss
2	Phase 3	800	550	300	Prairie junegrass	0-5	I	I	
11	Elloom				Thredleaf & needleleaf sedge	0-5	I	I	
4	Cerdum				Other perennial grasses	0-5	I/D	I/D	
	Weingart								
	Phase 2 and 3 have similar plant communities but vary in production				<u>Forbs</u>				
					American vetch		D	D	
					Scarlet globemallow		I	I	
					Western yarrow		I	I	
					Milkvetch	5-10	---	---	
					Biscutroot		I	I	
					Lomatium		I	D	
					Fringed sagewort		I	I	
					<u>Woody Species</u>				
					Winterfat		D	D	
					Nuttall saltbush		D	D	
					Big sagebrush	0-10	I	I	
					Pricklypear		I	I	

APPENDIX 3.4: CONTINUED

Soil Subgroup	Range Sites By Soil Groups and Precipitation Zone	Potential Production (Lbs/Ac, Dry Weight)			Potential Native Plant Community Common Plant Name and Percent Composition by Weight	Livestock Grazing Response		Invader Plants
		Favorable Year	Normal Year	Unfavorable Year		Cattle	Sheep	
6	<u>DENSE CLAY 10-14"</u>				<u>Grasses and Grasslike</u>			
	Phase 1	800	600	400	Western and thickspike	40-50	D	D
	Bowdoin				wheatgrass.			Foxtail barley
	(protected phase)				Green needlegrass	10-40	D	D
					Prairie junegrass	0-5	I	I
					Cusick bluegrass	0-5	I	I
2	Phase 2	300	200	80	Sandberg bluegrass	0-5	I	I
	Tealette				Needleleaf sedge	0-5	I	I
13	Phase 3	800	600	400	<u>Forbs</u>			
	Vanda				Eriogonum		I	I
13	Vanda				Ruscitroot		I	D
					Wild onion	0-5	I	I
					Thermopsis spp.	---	---	---
					Other perennial Forbs	I	I	
	Phase 1, 2 and 3 have similar plant communities but vary in production.				<u>Woody Species</u>			
					Greenswood	I/D	I/D	
					Big sagebrush	I	I	
					Nuttall saltbush	5-10	D	D
					Rabbitbrush	---	---	---
					Pricklypear	I	I	
14	<u>GRAVEL 10-14"</u>				<u>Grasses and grasslike</u>			
	Phase 1	725	600	300	Needleandthread	20-30	I	I
	Tinsley				Western and thickspike	10-20	D	D
					wheatgrass			Annals
					Plains subly	10-15	D	D
					Bluebunch wheatgrass	0-10	D	D
					Sand dropseed	5-10	D	D
					Other native perennial grasses.	5-10	I	I
					Threadleaf sedge	0-5	I	I
					<u>Forbs</u>			
					Green sagewort		I	I
					Fringed sagewort		I	I
					Hairy goldenaster		I	I
					Thermopsis	5-10	---	---
12 & 13	<u>SALINE UPLAND 10-14"</u>				<u>Woody Species</u>			
	Phase 1	300	500	200	Rabbitbrush	---	---	---
	Nobe				Rose spp.	I	I	I
					Yucca	5-10	I	I
					Creeping juniper	I	I	I
					Other native perennial woody species.	I	D	D
					<u>Grasses and Grasslike</u>			
					Alkali sacaton	25-40	D	D
					Western and thickspike	20-30	D	D
					wheatgrass			Foxtail barley
					Inland saltgrass	10-15	D	D
					Nuttall alkali grass	10-20	D	D
					Other perennial grasses	5-10	D	D
					<u>Forbs</u>			
9	Phase 2	700	500	200	Eriogonum spp.		I	D
	Benz*				Poverty sunweed	0-5	I	I
					Other native perennial forbs	I	I	I
					<u>Woody Species</u>			
					Greenswood	20-30	I/D	I/D
					Nuttall saltbush	D	D	D

*Includes wider variety of perennial grasses than typical saline upland range site: including blue grama and clubmoss.

APPENDIX 3.4: CONTINUED

Soil Subgroup	Range Sites By Soil Groups and Precipitation Zone	Potential Production (Lbs/Ac, Dry Weight)			Potential Native Plant Community Common Plant Name and Percent Composition by Weight	Livestock Grazing Response		Invader Plants
		Favorable Year	Normal Year	Unfavorable Year		Cattle	Sheep	
3 & 4	<u>SHALZ</u> 10-14"	500	400	300	<u>Grasses and Grasslike</u>			
					Western and thickspike wheatgrass	20-30	D	D
					Prairie sandreed	10-30	D	D
					Alkali sacaton	10-20	D	D
					Inland saltgrass	10-15	D	D
					Other native perennial grasses.	10-15	D	D
					<u>Forbs</u>			
					Eriogonum		I	D
					Poverty sumpweed		I	I
					Thermopsis spp.	0-5	---	---
					Other native perennial forbs.		I	I
					<u>Woody Species</u>			
					Rose spp.		D	D
					Greasewood		D	D
3 & 4	<u>BADLANDS</u> 10-14"	500	400	300	Nuttall saltbush	10-20	D	D
					Shadscale		D	D
					Other native shrubs		I	I
					<u>Grasses and Grasslike</u>			
					Western wheatgrass	20-40	D	D
					Green needlegrass	10-20	D	D
					Little bluestem	0-5	D	D
					Plains muhly	0-10	D	D
					Prairie sandreed	0-5	D	D
					Other perennial grasses	10-20	I/D	I/D
					<u>Forbs</u>			
					American vetch		D	D
					Prairieclover		D	D
					Onion	0-5	I	I
					Scarlet globemallow		I	I
					<u>Woody Species</u>			
					Big sagebrush		I	I
					Rubber rabbitbrush	0-10	---	D
					Greasewood		I/D	I/D

Source: 10-14" Precipitation Zone Data is from Eastern Glaciated Plains and Foothills and Mountains.

15-19" Precipitation Zone Data is from Western Glaciated Plains and Foothills and Mountains.

Geographic Areas, Tech. Guide April, 1979, USDA, SCS---Montana with minor modifications by C. Clark and J. Fahlgren, BLM.

APPENDIX 3.5: PLANT SPECIES LIST

GRASS and GRASSLIKE

Common Name	Scientific Name	Common Name	Scientific Name
Carolina foxtail	<i>Alopecurus carolinianus</i>	Canada wildrye	<i>Elymus canadensis</i>
Redtop	<i>Agrostis alba</i>	Russian wildrye	<i>Elymus junceus</i>
Bluebunch wheatgrass	<i>Agropyron spicatum</i>	Six weeks fescue	<i>Festuca octoflora</i>
Crested wheatgrass	<i>Agropyron cristatum</i>	Foxtail barley	<i>Hordeum jubatum</i>
Thickspike wheatgrass	<i>Agropyron dasystachyum</i>	Spikerush	<i>Juncus spp</i>
Western wheatgrass	<i>Agropyron smithii</i>	Prairie junegrass	<i>Koeleria cristata</i>
Slender wheatgrass	<i>Agropyron trachycaulum</i>	Plains muhly	<i>Muhlenbergia cuspidata</i>
Little bluestem	<i>Andropogon scoparius</i>	Mat muhly	<i>Muhlenbergia richardsonis</i>
Red threeawn	<i>Aristida longiseta</i>	Indian ricegrass	<i>Oryzopsis hymenoides</i>
American sloughgrass	<i>Beckmannia syzigachne</i>	Big bluegrass	<i>Poa ampla</i>
Blue grama	<i>Bouteloua gracilis</i>	Canby bluegrass	<i>Poa cambyi</i>
Smooth brome	<i>Bromus inermis</i>	Kentucky bluegrass	<i>Poa pratensis</i>
Japanese brome	<i>Bromus japonicus</i>	Sandberg bluegrass	<i>Poa secunda</i>
Cheatgrass	<i>Bromus tectorum</i>	Timblegrass	<i>Schedonnardus paniculatus</i>
Bluejoint	<i>Calamagrostis canadensis</i>	Bullrush	<i>Scirpus spp</i>
Plains reedgrass	<i>Calamagrostis montanensis</i>	Squirrel tail	<i>Sitanion hystrix</i>
Prairie sandreed	<i>Calamovilfa longifolia</i>	Dropseed	<i>Sporobolus spp</i>
Sedge	<i>Carex spp</i>	Alkali sacaton	<i>Sporobolus airoides</i>
Threadleaf sedge	<i>Carex filifolia</i>	Alkali cordgrass	<i>Spartina gracilis</i>
Needleleaf sedge	<i>Carex stenophylla</i>	Needleandthread	<i>Stipa comata</i>
Hair grass	<i>Deschampsia spp</i>	Green needlegrass	<i>Stipa viridula</i>
Inland saltgrass	<i>Distichlis stricta</i>	Porcupine grass	<i>Stipa spartea</i>
Barnyard grass	<i>Echinochloa crusgalli</i>	Common wheat	<i>Triticum aestivum</i>

HALF SHRUB and FORB

Common Name	Scientific Name	Common Name	Scientific Name
Yarrow	<i>Achillea lanulosa</i>	Bull thistle	<i>Cirsium vulgare</i>
Western yarrow	<i>Archillea millefolium</i>	Narrowleafed collomia	<i>Collomia linearis</i>
Nodding onion	<i>Allium cernuum</i>	Bastard toadflax	<i>Comandra umbellata</i>
Blue onion	<i>Allium textile</i>	Minerscandle	<i>Cryptantha bradburiana</i>
Field pussytoes	<i>Antennaria neglecta</i>	Hawksbeard	<i>Crepis spp</i>
Rose pussytoes	<i>Antennaria rosea</i>	Larkspur	<i>Delphinium spp</i>
Green sawwort	<i>Artemisia dracunculoides</i>	Shootingstar	<i>Dodecatheon conjugens</i>
Cudweed sawwort	<i>Artemisia ludoviciana</i>	Horsetail	<i>Equisetum spp</i>
Spreading pasqueflower	<i>Anemone patens</i>	Plains (western) wallflower	<i>Erysimum asperum</i>
Loco weed	<i>Astragalus spp</i>	Fleabane	<i>Erigeron spp</i>
Pursh loco (wooly pod)	<i>Astragalus purshii</i>	Fernleaf fleabane	<i>Erigeron compositus</i>
Green milkweed	<i>Asclepias triflorata</i>	Eriogonum (buckwheat)	<i>Eriogonum spp</i>
Milkweed species	<i>Asclepias spp</i>	Low fleabane	<i>Erigeron pumilus</i>
Aster spp	<i>Aster spp</i>	Leafy spurge	<i>Euphorbia esula</i>
Many flowered aster	<i>*Aster ericoides</i>	Yellowbell	<i>Fritillaria pudica</i>
Mustard	<i>Brassica spp</i>	Brown-eyed Susan	<i>Gaillardia aristata</i>
Roundleaf harebell	<i>Campanula rotundifolia</i>	Bedstraw	<i>Gallium boreale</i>
Field chickweed	<i>Cerastium arvense</i>	Scarlet gaura	<i>Gaura coccinea</i>
Lambsquarter	<i>Chenopodium album</i>	White geranium	<i>Geranium richardsonii</i>
Hairy goldenaster	<i>Chrysopsis villosa</i>	Prairie smoke	<i>Geum triflorum</i>
Thistle	<i>Cirsium spp</i>	American locorice	<i>Glycyrrhiza lepidota</i>
Canada thistle	<i>Cirsium arvense</i>	Curly cup gumweed	<i>Grindelia squarrosa</i>
Wayleaf thistle	<i>Cirsium undulatum</i>	Stickseed	<i>Hackelia spp</i>

* Species unlisted in Standardized Plant Names for Montana

HALF SHRUB and FORB cont.

Common Name	Scientific Name	Common Name	Scientific Name
Halogeton	<i>Halogeton glomeratus</i>	White prairie clover	<i>Petalostemon candidus</i>
Sun flower	<i>Helianthella</i> spp	Purple prairie clover	<i>Petalostemon purpurcum</i>
Annual sunflower	<i>Helianthus annuus</i>	Hoods phlox	<i>Phlox hoodii</i>
Stiff sunflower	<i>*Helianthus rigidus</i>	Wooly plantain	<i>Plantago patagonica</i>
Stemless hymenoxys	<i>Hymenoxys acaulis</i>	Spindle plantain	<i>Plantago patagonica</i>
Hymenoxys	<i>Hymenoxys</i> spp	(Spiny indianwheat)	<i>spinulosa</i>
Pingue humenoxys	<i>Hymenoxys richardsonii</i>	(Wooly indianwheat)	<i>gnaphaloides</i>
Poverty weed	<i>Iva axillaris</i>	Cinquefoil	<i>Potentilla</i> spp
Kochia	<i>Kochia americana</i>	Gland cinquefoil	<i>Potentilla glandulosa</i>
Belvedere summercypress	<i>Kochia scoparia</i>	Scurfpea	<i>Psoralea</i> spp
Stickseed	<i>Lappula</i> spp	Silverleaf scurfpea	<i>Psoralea argophylla</i>
Dotted gay feather	<i>Liatris punctata</i>	Common breadroot scurfpea	<i>Psoralea esculenta</i>
Perennial flax	<i>Linum perenne</i>	Buttercup	<i>Ranunculus abortivus</i>
Biscuitroot	<i>Lomatium foeniculaceum</i>	Buttercup	<i>Ranunculus</i> spp
Bigseed lomatium	<i>Lomatium macrocarpum</i>	Sagebrush buttercup	<i>Ranunculus glaberrimus</i>
Lupine	<i>Lupinus</i>	Prairie coneflower	<i>Ratibida columnifera</i>
Skeletonweed	<i>Lygodesmia</i> spp	Dock	<i>Rumex</i> spp
Rush skeletonweed	<i>Lygodesmia juncea</i>	Russian thistle	<i>Salsola kali tenuiflora</i>
Pink pincushioncactus	<i>Mammillaria vivipara</i>	Small clubmoss	<i>Selaginella densa</i>
White sweetclover	<i>Melilotus alba</i>	Grounse	<i>Senecio</i> spp
Yellow sweetclover	<i>Melilotus officinalis</i>	Tembleweed/mustard	<i>Sisymbrium</i> spp
Alfalfa	<i>Medicago sativa</i>	Goldenrod	<i>Solidago</i> spp
Brookmint	<i>*Meattha canadensis</i>	Missouri goldenrod	<i>Solidago missouriensis</i>
Microseris	<i>Microseris</i> spp	Stiff goldenrod	<i>Solidago rigida</i>
Daggerhilt (gumbo weed)	<i>Monolepis nuttalliana</i>	Scarlet globemallow	<i>Sphaeralcea coccinea</i>
Wildparsley	<i>Musineon divaricatum</i>	Woundwort (mint)	<i>Stachys palustris</i>
Forgetmenot	<i>Myosotis</i> spp	Common dandelion	<i>Taraxacum officinale</i>
Gumbo lily	<i>Oenothera caespitosa</i>	Fanweed	<i>Thlaspi arvense</i>
Plains pricklypear	<i>Opuntia polyacantha</i>	Mountain thermopsis	<i>Thermopsis montana</i>
Yellow owl clover	<i>Orthocarpus luteus</i>	Common selfsify	<i>Tragopogon dubius</i>
Crazyweed	<i>Oxytropis</i> spp	American vetch	<i>Vicia americana</i>
White pointloco	<i>Oxytropis sericea</i>	Yellow prairie violet	<i>Viola nuttallii</i>
Penstemon	<i>Penstemon</i> spp	Cocklebur	<i>Xanthium</i> spp
White penstemon	<i>Penstemon albidus</i>	Deathcamas	<i>Zygadenus</i> spp

SHRUBS and TREES

Common Name	Scientific Name	Common Name	Scientific Name
Box elder	<i>Acer negundo</i>	Rocky Mountain juniper	<i>Juniperus scopulorum</i>
Junberry	<i>Amelanchier alnifolia</i>	Lodgepole pine	<i>Pinus contorta latifolia</i>
Silver sagebrush	<i>Artemisia cana</i>	Ponderosa pine	<i>Pinus ponderosa</i>
Big sagebrush	<i>Artemisia tridentata</i>	Cottonwood	<i>Populus</i> spp
Shadscale saltbush	<i>Atriplex confertifolia</i>	Plains cottonwood	<i>Populus sargentii</i>
Nuttall saltbush	<i>Atriplex nuttallii</i>	Pin cherry	<i>Prunus pennsylvanica</i>
Siberian peatree	<i>Caragana arborescens</i>	Douglas fir	<i>Pseudotsuga menziesii glauca</i>
Rubber rabbitbrush	<i>Chrysothamnus nauseosus</i>	Chokecherry	<i>Prunus virginiana</i>
River hawthorn	<i>Crataegus rivularis</i>	Skunkbrush	<i>Rhus trilobata</i>
Douglas rabbitbrush	<i>Chrysothamnus viscidiflorus</i>	Wild rose	<i>Rosa</i> spp
Green ash	<i>Fraxinus pennsylvanica</i>	Willow	<i>Salix</i> spp
Winterfat	<i>Eurotia lanata</i>	Greasewood	<i>Sarcobatus vermiculatus</i>
Broom snakeweed	<i>Gutierrezia sarothrae</i>	Buffaloberry	<i>Shepherdia argentea</i>
Common juniper	<i>Juniperus communis</i>	Western snowberry	<i>Symphoricarpos occidentalis</i>
Creeping juniper	<i>Juniperus horizontalis</i>	Yucca	<i>Yucca glauca</i>

Source: BLM, 1980.

APPENDIX 3.6: ECOLOGICAL RANGE CONDITION BY SOIL SUBGROUP, IN ACRES AND PERCENT OF TOTAL

A-156

Soil Subgroup	Havre Resource Area						Phillips Resource Area						Valley Resource Area					
	Public Land Acres and % of Total	Excellent and %	Good and %	Fair and %	Poor and %	Unclassified and %	Public Land Acres and % of Total	Excellent and %	Good and %	Fair and %	Poor and %	Unclassified and %	Public Land Acres and % of Total	Excellent and %	Good and %	Fair and %	Poor and %	Unclassified and %
1.	140,138 40.7	1,219 0.9	94,214 67.3	43,489 31	347 0.2	869 0.6	353,946 47.7	413 .12	287,239 81.2	65,601 18.5	676 0.2	17 -	193,238 29.2	2,743 1.4	98,023 50.7	91,308 47.3	1,164 0.6	
2.	74,796 21.7	758 0.1	52,830 70.6	20,962 28	246 0.3		137,096 18.5	320 0.2	83,004 60.5	53,413 39	317 0.2	42 -	145,299 21.9	1,277 0.9	52,938 36.4	90,101 62	983 0.7	
3.	3,002 0.9		2,663 88.7	335 11.2	4 1		71,432 9.6	667 1	65,069 91.1	5,672 7.9	24 -		141,029 21.3	368 0.3	62,763 44.5	77,875 55.2	23 -	
4.	44,047 12.8	5 -	14,632 33.2	14,177 32	170 0.4	15,063 34.2	79,718 10.7	578 0.7	45,835 57.5	6,489 8.2	57 -	26,759 33.6	49,404 7.5	132 0.3	10,639 21.6	12,857 26	41 -	25,735 52.1
5.	7,980 2.3		3,505 43.9	4,432 55.6	43 0.5		5,218 0.7	110 2.1	4,867 93.3	228 4.4	13 0.2		29,243 4.4	1,069 3.7	20,142 68.9	8,032 27.4		
6.	12,172 3.6	7 0.1	8,475 69.6	3,686 30.3	4 -		8,087 1.1	50 0.6	5,860 72.5	1,611 19.9	566 7		30,661 4.6	297 1	18,628 60.8	10,777 35.1	105 0.3	854 2.8
7.	7,625 2.2	8 0.1	3,335 43.8	4,280 56.1	2 -		1,889 0.3		1,845 97.7	44 2.3			2,084 0.3	83 3.9	1,172 36.5	807 38.6	22 1	
8.	7,873 2.2	323 4.1	3,014 38.3	4,510 57.3	26 0.3		none mapped						2,616 0.4	12 0.5	1,765 67.5	839 32		
9.	14,482 4.2	17 0.1	5,100 35.2	9,188 63.4	177 1.2		7,671 1.2	443 5.8	5,682 74.1	1,492 19.4	54 0.7		11,652 1.8	179 1.6	6,746 57.9	4,699 40.3	16 0.1	12 0.1
10.	11,149 3.3	310 2.8	4,026 36.1	6,767 60.7	46 0.4		32,041 4.3	252 0.8	18,162 56.7	13,423 41.9	184 0.6		4,088 0.6	163 4	1,134 27.8	2,782 68	7 0.2	2 -
11.	3,458 1	182 5.3	2,145 62	1,131 32.7			10,876 1.5	178 1.7	5,984 55	4,657 42.8	57 0.5		10,906 1.6	70 0.6	3,971 36.4	6,841 62.8	24 2	
12.	4,371 1.3		2,001 45.8	2,202 50.4	168 3.8		8,739 1.2	2 -	5,864 67.1	2,501 28.6	372 4.3		14,842 2.2	86 6	4,480 30.1	10,236 69	40 3	
13.	3,633 1		1,049 28.9	2,386 65.7	198 5.4		24,892 3.3	13 -	14,724 59.2	9,672 38.9	483 1.9		25,700 3.9	53 0.2	5,205 20.3	20,430 79.5	12 -	
14.	2,175 0.6	15 0.7	1,433 65.9	610 28	117 5.4		878 0.1		545 62	333 38			1,583 0.2	55 3.6	1,237 78.1	280 17.6	11 0.7	
15.	1,351 0.4	824 61	495 36.6	32 2.3														
18.	2,609 0.8	576 22.1	1,376 52.7	657 25.2														
19.	3,549 1	975 27.5	1,392 39.2	1,178 33.2	4 0.1													
Total	344,410 100	5,218 1.5	201,686 58.6	120,022 34.8	1,553 0.5	15,931 4.6	742,483 100	3,026 0.4	544,680 73.4	163,136 22.2	2,803 0.4	26,838 3.6	662,345 100	6,587 1	288,843 43.6	337,864 51	2,448 0.4	26,603 4

Source: BIM, 1980.

APPENDIX 3.7: RANGE CONDITION SUMMARY BY AMP STATUS IN ACRES AND PERCENT

AMP Status	Total Acres		Excellent		Good		Fair		Poor		Unclassified	
	BLM	Other	BLM	Other	BLM	Other	BLM	Other	BLM	Other	BLM	Other
Havre Resource Area												
Existing AMPs	68,784 20	70,039 22.5	265 .4	18	53,932 78.4	59,878 85.5	13,707 19.9	8,609 12.3	321 .5	320 .5	559 .8	1,214 1.7
Proposed* AMPs	77,644 22.9	36,493 11.7	3,041 3.9	825 2.3	22,554 29	18,440 50.6	47,480 61.2	16,524 45.3	648 .8	58 .1	3,921 5.1	606 1.7
Potential** AMPs	134,147 38.9	166,937 53.6	1,070 .8	136 .1	94,455 70.4	131,336 78.7	33,323 24.8	26,604 15.9	195 .2	337 .2	5,104 3.8	8,524 5.1
Non- AMPs	59,364 17.2	37,999 12.2	771 1.3	90 .2	29,391 49.5	25,899 68.2	22,930 38.6	9,294 24.5	384 .7		5,888 9.9	2,716 7.1
Unallocated	4,471 1.3	273 .1	72 1.6		1,353 30.3	256 93.9	2,582 57.7	15 5.5	4 .1		460 10.3	2 .6
Total	344,410 100	311,701 100	5,219 1.3	1,069 .3	201,685 58.6	235,809 75.7	120,022 34.8	61,046 19.6	1,552 .5	715 .2	15,932 4.6	13,062 4.2
Valley Resource Area												
Existing AMPs	214,572 32.4	64,649 24.7	2,353 1	657 1	86,091 40.1	33,991 52.6	116,338 54.2	28,733 44.4	486 .2	95 .2	9,304 4.3	1,173 1.8
Proposed* AMPs	257,699 38.9	82,939 31.6	858 .3	406 .5	90,068 36.9	34,751 41.9	154,015 59.8	46,083 35.6	245 .1	123 .1	12,533 4.9	1,576 1.9
Potential** AMPs	151,468 22.9	78,269 29.9	2,607 1.7	2,836 3.6	90,320 59.6	43,270 55.3	53,052 35.1	31,510 40.3	1,269 .8	16 .8	4,220 2.8	637 .8
Non- AMPs	37,792 5.7	36,022 13.8	748 2	413 1.1	21,940 38	18,136 50.3	14,173 37.5	17,304 45.7	385 .1	24 .8	546 1.4	145 .4
Unallocated	814 .1		21 2.6		444 54.5		286 35.1		63 7.8			
Total	662,345 100	261,879 100	6,587 1	4,312 1.7	288,843 43.6	130,148 49.7	337,864 51	123,630 47.2	2,448 .4	258 .1	26,603 4	9,331 1.3
Phillips Resource Area												
Existing AMPs	275,630 37.1	122,562 40.2	2,131 .8	1,046 .8	193,983 70.3	78,665 64.2	68,511 24.8	39,436 32.2	1,831 .7	693 .6	9,174 3.3	2,722 2.2
Proposed* AMPs	119,666 16.1	44,117 14.5			73,820 61.4	26,580 60.2	37,448 31.3	16,239 36.8	321 .3	347 .8	8,077 6.7	951 2.2
Potential** AMPs	322,130 43.5	130,581 42.8	895 .3	383 .3	259,165 80.4	102,629 78.6	52,729 16.4	24,090 18.4	639 .2	124 .1	8,702 2.7	3,355 2.6
Non- AMPs	24,097 3.2	7,517 2.5			16,752 69.5	4,406 58.6	6,448 26.8	2,553 34	12 .5	35 .5	885 3.7	523 6.9
Unallocated	960 .1				960 100							
Total	742,483 100	304,777 100	3,026 .4	1,429 .5	544,680 73.4	212,280 69.5	165,136 22.2	82,318 27	2,803 .4	1,199 .4	26,838 3.6	7,551 2.4

* Proposed AMPs in Alternative B (also in A, C and D).

** Proposed AMPs in Alternative A, C and D.

Phillips Resource Area

Allotment Number	Allotment Name	BLM Acres	Crazing System	Trend	Remarks	Allotment Number	Allotment Name	BLM Acres	Crazing System	Trend	Remarks
6010	East Fork	2,019.9	RR	up		5001	Border	1,847.6	RR	static	
6011	Benette Coulee	3,512.1	RR	up		5002	North Woody Island	7,384	RR	up	
6012	Border	9,108.8	RR	up		5008	Sunny Slope	3,165.9	RR	up	
6014	Silver Bow	7,899.9	C	up		5017	International	4,250.2	RR	static	
6018	Nace	1,994.1	RR	up	With Silver Bow ANP	5030	Danham Coulee	2,797.1	RR	up	
6022	Upper Woody Island	2,478.5	DR	static		5032	Johns Coulee	399.8	S	static	
6024	North Woody Island	1,882.8	RR	up	Part of #5002	5034	Plainsview	4,845.8	RR	up	
6047	Mud Lake	2,358.4	C	static		5036	Whitewater Lake	7,586.5	RR	static	
6055	Lower Choteau Coulee	1,084	DR	up		5037	Lone Tree Coulee	7,092.1	RR	up	
6062	Wood Coulee	17,327	C	static	Includes 11 different systems, four are in upward trend	5038	Reservoir	1,083	DR	up	
						5051	Woody Island	12,114.9	RR	static	
						5065	East Fork Whitewater	6,113	RR	up	
6063	Windbreak	1,275.1	RR	up		5084	Upper Coop Coulee	1,900.7	RR	static	
6067	Windmill	618.6	DR	static		5085	Coop Coulee	799.5	S	up	
6071	Hanson Flat	3,362.3	C	static		5087	Joe Bell Coulee	6,915.9	RR	static	
6074	Williams Bench	642.7	DR	static		5089	Martine Coulee	14,214.1	RR	static	
6075	Lohman Common	3,578.6	RR	static	Not fully implemented	5093	Lambing Coulee	9,942.6	RR	up	
6099	Riggen Common	5,684.9	DR	up		5096	Lamere Coulee	14,999.6	RR	static	
6111	Zurich Bench	3,081.9	RR	up		5109	West Carland Creek	5,029.5	DR	up	
6115	Unit II Wood Coulee	160	DR	static		5110	East Carland Creek	6,086.7	DR	up	
6230	Horse Corral Coulee	2,881.1	RR	up		5111	Little Cottonwood Creek	4,915.4	RR	up	
6231	Fifteen Mile	1,524.3	DR	static		5115	Big Bend	1,460.3	DR	up	
6232	Thirty Mile	718.5	S	up		5329	Cow Creek	963	DR	static	
6243	Big Bend	590.2	D	static		5339	Crooks Coulee	3,138.8	RR	up	
		68,783.7				5344	Forth Creek	4,638.6	RR	up	
						5345	Second Creek	1,945.7	DR	up	
						5348	Coon Coulee	159.6	RR	down	Part of 4525
						5363	Black Coulee	1,541.8	RR	up	
						5368	Beavers	879.6	RR	static	
						5374	Halfway Coulee	2,200.1	C	static	
						5387	West Alkali Creek	9,613.7	RR	static	
						5388	Rudolph Coulee	7,021.4	RR	up	
						5407	Albee Coulee	3,103	RR	up	
						5408	Truthbond Coulee	12,490.5	RR	static	Not implemented
						5415	Overflow Coulee	8,446	RR	static	
						5417	Whiterock Coulee	17,915.8	RR	up	
						5427	North Flat Creek	16,431	RR	static	
						5428	Rheumatism Coulee	3,779.6	RR	static	Not implemented
						5429	Spring Creek	13,975.1	DR	up	
						5432	Upper Black Coulee	5,557.2	C	static	Not implemented
						5437	Sage Creek	3,125.1	RR	up	
						5439	Flat Creek	13,041.7	RR	up	
						5440	West Flat Creek	8,950.8	RR	up	
						5441	Lower Alkali Coulee	959.6	RR	up	
						5443	First Creek Hall	6,094.7	RR	up	
						5445	Upper First Creek	4,186.8	RR	up	
						5454	Dog Creek	2,024.6	S	down	
						(47)		275,630			
Valley Resource Area											
4000	Upper Crow Creek	4,501.8	DR	static		5374	Halfway Coulee	2,200.1	C	static	
4002	Upper Bluff Creek	3,097.2	DR	static		5387	West Alkali Creek	9,613.7	RR	static	
4003	Upper E. PK. Crow Creek	5,604.3	RR	N.E.		5388	Rudolph Coulee	7,021.4	RR	up	
4008	W. Fork Bluff Creek	4,052.9	DR	static		5407	Albee Coulee	3,103	RR	up	
4022	Lower Bluff Creek	4,694.4	RR	N.E.		5408	Truthbond Coulee	12,490.5	RR	static	Not implemented
4041	Anderson-Ojuel	17,216.7	RR	static		5415	Overflow Coulee	8,446	RR	static	
4053	East Fork Willow Creek	15,645.5	RR	N.E.		5417	Whiterock Coulee	17,915.8	RR	up	
4078	Upper Lime Creek	3,143.1	RR	down		5427	North Flat Creek	16,431	RR	static	
4301	Upper Buggy Creek	8,168.1	RR	N.E.		5428	Rheumatism Coulee	3,779.6	RR	static	Not implemented
4525	Coon Coulee	2,146.1	RR	down		5429	Spring Creek	13,975.1	DR	up	
4548	Box Elder Creek	12,717.1	up	RR		5432	Upper Black Coulee	5,557.2	C	static	Not implemented
4563	Coyote Creek	6,387.8	RR	down		5437	Sage Creek	3,125.1	RR	up	
4571	Crant Coulee	15,214.5	RR	up		5439	Flat Creek	13,041.7	RR	up	
4574	Miller Coulee	22,894.7	RR	static		5440	West Flat Creek	8,950.8	RR	up	
4576	Lower Willow Creek	5,312.6	DR	N.E.		5441	Lower Alkali Coulee	959.6	RR	up	
4700	Upper McEthan Creek	5,725.3	RR	down		5443	First Creek Hall	6,094.7	RR	up	
4701	Davidson Coulee	5,295.5	RR	static		5445	Upper First Creek	4,186.8	RR	up	
4708	Idupar Creek	10,894.6	RR	up		5454	Dog Creek	2,024.6	S	down	
4713	Lower Crow Creek	3,413.7	RR	static							
4715	East Rock Creek	1,912.8	DR	up							
4716	Jones Coulee	3,670.8	RR	N.E.							
4718	Upper Willow Creek	26,222.5	DR	static							
4723	Little Papoose Creek	8,865.9	RR	static							
4726	Eagles Nest Coulee	15,073.9	RR	up							
		214,571.8									

Technical Note 283 (Duff, D. A. and Cooper, J. L. 1976 Technical Note 283: U.S.D.I., BLM) was used to conduct stream habitat surveys in the Prairie Potholes EIS area. TN-283 was modified for these surveys by changing the vegetation classes for streambank cover as defined on page 17 of that document.

The four vegetation classes and the specific criteria used for ocular evaluation in the EIS area are:

Class 1 (4 points) Rather than "Forested"

- a. if the streambank is medium to densely covered (more than 30 percent canopy cover) with trees and an understory of shrubs, forbs and grasses.
- b. or is a medium to densely covered streambank (more than 50 percent cover) with riparian vegetation and the remainder of the vegetation is composed of other woody types or trees.
- c. or is a densely covered streambank (more than 80 percent cover) with a mixture of shrubs, forbs and grasses (Chapter 3, "Riparian Vegetation") and the remainder of vegetation is riparian vegetation or trees.
- d. or is a very densely covered streambank (more than 90 percent cover) with tall grasses (e.g. prairie cordgrass) or mid grasses (e.g. green needlegrass) as dominant vegetation.
- e. with less than 10 percent of bank barren of vegetative cover. (Includes bare soil, rocks, etc.)

Class 2 (3 points) Rather than "Brush"

- a. if the streambank is lightly covered (10 to 30 percent canopy cover) with trees and an understory of shrubs, forbs and grasses.
- b. or is a lightly covered streambank (20 to 50 percent cover) with riparian vegetation and the remainder of the vegetation is composed of woody type vegetation and grasses.
- c. or is a medium to densely covered streambank (50 to 80 percent cover) with a woody type mixture of shrubs, forbs and grasses, (Chapter 3, "Riparian Vegetation") and the remainder of the vegetation is riparian vegetation and trees.
- d. or is a densely covered streambank (60 to 90 percent cover) with tall grasses or mid grasses as dominant vegetation.
- e. with less than 25 percent of bank barren of vegetative cover. (Includes bare soil, rocks, etc.)

Class 3 (2 points) Rather than "Grass"

- a. if the streambank has less than 10 percent tree canopy cover and has a lightly to mediumly covered streambank (10 to 25 percent cover) with riparian vegetation.
- b. or is a lightly to mediumly covered streambank (20 to 50 percent cover) with a mixture of shrubs, forbs and grasses (Chapter 3, "Riparian Vegetation") and the remainder of the vegetation is riparian vegetation and trees.
- c. or is a mediumly covered streambank (45 to 60 percent cover) with tall grasses or mid grasses as dominant vegetation.
- d. with less than 50 percent of streambank barren of vegetative cover.

Class 4 (1 point) Rather than "Exposed"

- a. if the streambank has less than 1 percent canopy cover of decadent trees and is lightly covered (less than 20 percent cover) with a mixture of mesic shrubs, forbs and grasses, or riparian vegetation.
- b. or is a lightly covered streambank (less than 45 percent cover) with short grasses (e.g. blue grama) and mid grasses (e.g. western wheatgrass) as dominant vegetation.
- c. with more than 50 percent of streambank barren of vegetative cover regardless of kind of shrubs, forbs and grasses.

APPENDIX 3.10: WILDLIFE SPECIES LIST

MAMMALS

Common Name	Scientific Name	Common Name	Scientific Name
Masked Shrew	<i>Sorex cinereus</i>	Montane Vole	<i>Microtus montanus</i>
* Merriam Shrew	<i>Sorex merriami</i>	House Mouse	<i>Mus musculus</i>
x Preble Shrew	<i>Sorex preblei</i>	Norway Rat	<i>Rattus norvegicus</i>
Vagrant Shrew	<i>Sorex vagrans</i>	Western Jumping Mouse	<i>Zapus princeps</i>
x Long-legged Myotis	<i>Myotis volans</i>	Whitetail Jackrabbit	<i>Lepus townsendi</i>
Little Brown Myotis	<i>Myotis lucifugus</i>	Mountain Cottontail	<i>Sylvilagus nuttalli</i>
Little Long-eared Bat	<i>Myotis evotis</i>	Desert Cottontail	<i>Sylvilagus auduboni</i>
Small-footed Myotis	<i>Myotis leibii</i>	Porcupine	<i>Erethizon dorsatum</i>
Big Brown Bat	<i>Eptesicus fuscus</i>	Rocky Mountain Elk	<i>Cervus canadensis</i>
Hoary Bat	<i>Lasiurus cinereus</i>	Mule Deer	<i>Odocoileus hemionus</i>
x Bique-eared Bat	<i>Plecotus townsendii</i>	White-tailed Deer	<i>Odocoileus virginianus</i>
Silver-Haired Bat	<i>Lasionycteris noctivagans</i>	Pronghorn Antelope	<i>Antilocapra americana</i>
Raccoon	<i>Procyon lotor</i>		
Short-tailed Weasel	<i>Mustela erminea</i>		
Long-tailed Weasel	<i>Mustela frenata</i>		
Least Weasel	<i>Mustela nixosa</i>		
Mink	<i>Mustela vison</i>		
* Black-footed Ferret	<i>Mustela nigripes</i>		
Wolverine	<i>Gulo luscus</i>		
Stripped Skunk	<i>Mephitis mephitis</i>		
Badger	<i>Taxidea Taxus</i>		
River Otter	<i>Lutra canadensis</i>		
Red Fox	<i>Vulpes fulva</i>		
Coyote	<i>Canis latrans</i>		
* Gray Wolf	<i>Canis lupus</i>		
Cougar	<i>Felis concolor</i>		
x Canada Lynx	<i>Lynx canadensis</i>		
Bobcat	<i>Lynx rufus</i>		
Richardson Ground Squirrel	<i>Spermophilus richardsonii</i>		
Thirteen-line Ground Squirrel	<i>Spermophilus tridecemlineatus</i>		
Black-tailed Prairie Dog	<i>Cynomys ludovicianus</i>		
Least Chipmunk	<i>Eutamias minimus</i>		
Northern Pocket Gopher	<i>Thomomys talpoides</i>		
Wyoming Pocket Mouse	<i>Perognathus fasciatus</i>		
Ord Kangaroo Rat	<i>Dipodomys ordi</i>		
Beaver	<i>Castor canadensis</i>		
Northern Grasshopper Mouse	<i>Onychomys leucogaster</i>		
Western Harvest Mouse	<i>Reithrodontomys megalotis</i>		
Deer Mouse	<i>Peromyscus maniculatus</i>		
White-footed Mouse	<i>Peromyscus leucopus</i>		
Bushy-tailed Woodrat	<i>Neotoma cinerea</i>		
Meadow Vole	<i>Microtus pennsylvanicus</i>		
Prairie Vole	<i>Microtus ochrogaster</i>		
Sagebrush Vole	<i>Lagurus curtatus</i>		
Muskrat	<i>Ondatra zibethica</i>		

AMPHIBIANS

Common Name	Scientific Name
Plains Spadefoot	<i>Scaphiopus bombifrons</i>
Great Plains Toad	<i>Bufo cognatus</i>
Dakota Toad	<i>Bufo hemiophrys</i>
Rocky Mountain Toad	<i>Bufo woodhousei</i>
Boreal Chorus Frog	<i>Pseudacris triseriata</i>
Leopard Frog	<i>Rana pipiens</i>
Tiger Salamander	<i>Ambystoma tigrinum</i>

REPTILES

Common Name	Scientific Name
Prairie Rattlesnake	<i>Crotalus viridis</i>
Bull Snake	<i>Pituophis catenifer</i>
*Plains Hognose Snake	<i>Heterodon nasicus</i>
Racer	<i>Coluber constrictor</i>
Western Garter Snake	<i>Thamnophis elegans</i>
Plains Garter Snake	<i>Thamnophis radix</i>
Common Garter Snake	<i>Thamnophis sirtalis</i>
Painted Turtle	<i>Chrysemys picta</i>
*Western Spiny Softshell	<i>Trionyx spiniferus</i>
Short-horned Lizard	<i>Phrynosoma douglassi</i>
Sagebrush Lizard	<i>Sceloporus graciosus</i>
*Milk Snake	<i>Lampropeltis dolia</i>
*Common Snapping Turtle	<i>Chelydra serpentina</i>

* Endangered

x Species of special concern to Montana Department of Fish, Wildlife and Parks, 1979.

o Introduced species

BIRDS

Common Name	Scientific Name	Common Name	Scientific Name
Common Loon	<i>Gavia immer</i>	* Merlin	<i>Falco columbarius</i>
Red-Necked Grebe	<i>Podiceps grisegena</i>	Sharp-Tailed Grouse	<i>Pedioecetes phasianellus</i>
Horned Grebe	<i>Podiceps auritus</i>	Sage Grouse	<i>Centrocercus urophasianus</i>
Eared Grebe	<i>Podiceps nigricollis</i>	Ring-Necked Pheasant	<i>Phasianus colchicus</i>
Western Grebe	<i>Aechmophus occidentalis</i>	Blue Grouse	<i>Dendragapus obscurus</i>
Pied-Billed Grebe	<i>Podilymbus podiceps</i>	Ruffed Grouse	<i>Bonasa umbellus</i>
White Pelican	<i>Pelecanus erythrorhynchos</i>	Turkey	<i>Meleagris gallopauo</i>
Double-Crested Cormorant	<i>Phalacrocorax auritus</i>	Gray Partridge	<i>Perdix perdix</i>
Great Blue Heron	<i>Ardea herodias</i>	Sandhill Crane	<i>Grus canadensis</i>
Snowy Egret	<i>Egretta thula</i>	* Whooping Crane	<i>Grus americana</i>
Black-Crowned Night Heron	<i>Nycticorax nycticorax</i>	Virginia Rail	<i>Rallus limicola</i>
American Bittern	<i>Botaurus lentiginosus</i>	Sora	<i>Porzana carolina</i>
White-Faced Ibis	<i>Plegadis chihi</i>	American Coot	<i>Fulica americana</i>
Whistling Swan	<i>Olor columbianus</i>	* Mountain Plover	<i>Charadrius montanus</i>
Canada Goose	<i>Branta canadensis</i>	Semipalmated Plover	<i>Charadrius semipalmatus</i>
White-Fronted Goose	<i>Anser albifrons</i>	Piping Plover	<i>Charadrius melodus</i>
Snow Goose	<i>Chen caerulescens</i>	Killdeer	<i>Charadrius vociferus</i>
Ross' Goose	<i>Chen rossii</i>	American Golden Plover	<i>Pluvialis dominica</i>
Mallard	<i>Anas platyrhynchos</i>	Black-Bellied Plover	<i>Pluvialis squatarola</i>
Black Duck	<i>Anas rubripes</i>	Ruddy Turnstone	<i>Arenaria interpres</i>
Gadwall	<i>Anas strepera</i>	Common Snipe	<i>Capella gallinago</i>
Pintail	<i>Anas acuta</i>	* Long-Billed Curlew	<i>Numenius americanus</i>
Green-Winged Teal	<i>Anas crecca</i>	Upland Sandpiper	<i>Bartramia longicauda</i>
Blue-Winged Teal	<i>Anas discors</i>	Solitary Sandpiper	<i>Tringa solitaria</i>
Cinnamon Teal	<i>Anas cyanoptera</i>	Spotted Sandpiper	<i>Actitis macularia</i>
American Wigeon	<i>Anas americana</i>	Willet	<i>Catoptrophorus semipalmatus</i>
Northern Shoveler	<i>Anas clypeata</i>	Greater Yellowlegs	<i>Tringa melanoleucas</i>
Wood duck	<i>Aix sponsa</i>	Lesser Yellowlegs	<i>Tringa flavipes</i>
Redhead	<i>Aythya americana</i>	Pectoral Sandpiper	<i>Calidris melanotos</i>
Ring-necked Duck	<i>Aythya collaris</i>	White-Rumped Sandpiper	<i>Calidris fuscicollis</i>
Canvasback	<i>Aythya valisineria</i>	Baird's Sandpiper	<i>Calidris bairdii</i>
Lesser scaup	<i>Aythya affinis</i>	Least Sandpiper	<i>Calidris minutilla</i>
Common Goldeneye	<i>Bucephala clangula</i>	Western Sandpiper	<i>Calidris mauri</i>
Barrow's Goldeneye	<i>Bucephala islandica</i>	Short-Billed Dowitcher	<i>Limnodromus griseus</i>
Bufflehead	<i>Bucephala albeola</i>	Long-Billed Dowitcher	<i>Limnodromus scolopaceus</i>
White-winged Scoter	<i>Melanitta deglandi</i>	Stilt Sandpiper	<i>Micropalama himantopus</i>
Ruddy Duck	<i>Oxyura jamaicensis</i>	Semipalmated Sandpiper	<i>Calidris pusilla</i>
Hooded Merganser	<i>Lophodytes cucullatus</i>	Marbled Godwit	<i>Limosa fedoa</i>
Common Merganser	<i>Mergus merganser</i>	Sanderling	<i>Calidris alba</i>
Red-Breasted Merganser	<i>Mergus serrator</i>	American Avocet	<i>Recurvirostra americana</i>
* Goshawk	<i>Accipiter gentilis</i>	Black-Necked Stilt	<i>Himantopus mexicanus</i>
Sharp-Shinned Hawk	<i>Accipiter striatus</i>	Red Phalarope	<i>Phalaropus fulicarius</i>
* Cooper's Hawk	<i>Accipiter cooperii</i>	Wilson's Phalarope	<i>Steganopus tricolor</i>
Red-Tailed Hawk	<i>Buteo jamaicensis</i>	Northern Phalarope	<i>Lobipes lobatus</i>
Broad-Winged Hawk	<i>Buteo platypterus</i>	Herring Gull	<i>Larus argentatus</i>
* Swainson's Hawk	<i>Buteo swainsoni</i>	California Gull	<i>Larus californicus</i>
Rough-Legged Hawk	<i>Buteo lagopus</i>	Ring-Billed Gull	<i>Larus delawarensis</i>
* Ferruginous Hawk	<i>Buteo regalis</i>	Franklin's Gull	<i>Larus pipixcan</i>
* Golden Eagle	<i>Aquila chrysaetos</i>	Bonaparte's Gull	<i>Larus philadelphia</i>
* Bald Eagle	<i>Haliaeetus leucocephalus</i>	Forster's Tern	<i>Sterna forsteri</i>
Marsh Hawk	<i>Circus cyaneus</i>	Common Tern	<i>Sterna hirundo</i>
Prairie Falcon	<i>Falco mexicanus</i>	Black Tern	<i>Chlidonias niger</i>
* Peregrine Falcon	<i>Falco peregrinus</i>	Mourning Dove	<i>Zenaidura macroura</i>
Gyr Falcon	<i>Falco rusticolus</i>	Rock Dove	<i>Columba livia</i>
* Osprey	<i>Pandion haliaetus</i>	Yellow-Billed Cuckoo	<i>Coccyzus americanus</i>
American Kestrel	<i>Falco sparverius</i>	Black-Billed Cuckoo	<i>Coccyzus erythrophthalmus</i>

BIRDS continued

Common Name	Scientific Name	Common Name	Scientific Name
Barn Owl	<i>Tyto alba</i>	Red-Winged Blackbird	<i>Agelaius phoeniceus</i>
Screech Owl	<i>Otus asio</i>	Orchard Oriole	<i>Icterus spurius</i>
Great Horned Owl	<i>Bubo virginianus</i>	Northern Oriole	<i>Icterus galbula</i>
Snowy Owl	<i>Nyctea scandiaca</i>	Rusty Blackbird	<i>Euphaga carolinus</i>
* Burrowing Owl	<i>Athene cucularia</i>	Brewer's Blackbird	<i>Euphaga cyanocephalus</i>
Long-Eared Owl	<i>Asio otus</i>	Common Grackle	<i>Quiscalus quiscula</i>
Short-Eared Owl	<i>Asio flammeus</i>	Brown-Headed Cowbird	<i>Molothrus ater</i>
* Saw-Whet Owl	<i>Aegolius acadicus</i>	Western Tanager	<i>Piranga lucoviciana</i>
Poor-Will	<i>Phalaenoptilus nuttallii</i>	Rose-Breasted Grosbeak	<i>Pheucticus ludovicianus</i>
Common Nighthawk	<i>Chordeiles minor</i>	Black-Headed Grosbeak	<i>Pheucticus melanocephalus</i>
White-Throated Swift	<i>Aeronautes saxatilis</i>	Blue Grosbeak	<i>Guiraca caerulea</i>
Chimney Swift	<i>Chaetura pelagica</i>	Evening Grosbeak	<i>Hesperiphona vespertina</i>
Ruby-Throated Hummingbird	<i>Archilochus colubris</i>	Pine Grosbeak	<i>Pinicola enucleator</i>
Belted Kingfisher	<i>Mergaceryx alcyon</i>	Indigo Bunting	<i>Passerina cyanea</i>
Common Flicker	<i>Colaptes auratus</i>	* Dickcissil	<i>Spiza americana</i>
Red-Headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Lazuli Bunting	<i>Passerina amoena</i>
Lewis Woodpecker	<i>Melanerpes lewis</i>	Purple Finch	<i>Carpodacus purpureus</i>
Yellow-Bellied Sapsucker	<i>Sphyrapicus varius</i>	Gray-Crowned Rosy Finch	<i>Leucosticte tephrocotis</i>
Hairy Woodpecker	<i>Picoides villosus</i>	Black Rosy Finch	<i>Leucosticte atrata</i>
Dowry Woodpecker	<i>Picoides pubescens</i>	Hoary Redpoll	<i>Carduelis hornemanni</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>	Common Redpoll	<i>Carduelis flammea</i>
Western Kingbird	<i>Tyrannus verticalis</i>	Pine Siskin	<i>Carduelis pinus</i>
Scissor-tailed Flycatcher	<i>Muscivora forficata</i>	American Goldfinch	<i>Carduelis tristis</i>
Say's Phoebe	<i>Sayornis saya</i>	Red Crossbill	<i>Loxia curvirostra</i>
Alder Flycatcher	<i>Empidonax alnorum</i>	Rufous-Sided Towhee	<i>Pipilo erythrophthalmus</i>
Cedar Waxwing	<i>Bombicilla cedrorum</i>	Willow Flycatcher	<i>Empidonax traillii</i>
Northern Shrike	<i>Lanius excubitor</i>	Least Flycatcher	<i>Empidonax minimus</i>
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Dusky Flycatcher	<i>Empidonax oberholseri</i>
Starling	<i>Sturnus vulgaris</i>	Western Flycatcher	<i>Empidonax difficilis</i>
Solitary Vireo	<i>Vireo solitarius</i>	Western Wood Pewee	<i>Contopus sordidulus</i>
Red-Eyed Vireo	<i>Vireo olivaceus</i>	Horned Lark	<i>Eremophila alpestris</i>
Warbling Vireo	<i>Vireo gilvus</i>	Violet-Green Swallow	<i>Tachycineta thalassina</i>
Black & White Warbler	<i>Mniotilta varia</i>	Tree Swallow	<i>Iridoprocne bicolor</i>
Tennessee Warbler	<i>Vermivora peregrina</i>	Bank Swallow	<i>Riparia riparia</i>
Orange-Crowned Warbler	<i>Vermivora celata</i>	Rough-Winged Swallow	<i>Stelgidopteryx ruficollis</i>
Yellow Warbler	<i>Dendroica petechia</i>	Barn Swallow	<i>Hirundo rustica</i>
Yellow-Rumped Warbler	<i>Dendroica coronata</i>	Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
Blackpoll Warbler	<i>Dendroica striata</i>	Purple Martin	<i>Progne subis</i>
Palm Warbler	<i>Dendroica pinus</i>	Blue Jay	<i>Cyanocitta cristata</i>
Ovenbird	<i>Seiurus aurocapillus</i>	Pinyon Jay	<i>Gymnorhinus cyanocephalus</i>
Northern Waterthrush	<i>Seiurus noveboracensis</i>	Gray Jay	<i>Perisoreus canadensis</i>
Mourning Warbler	<i>Oporornis philadelphia</i>	Black-Billed Magpie	<i>Pica pica</i>
McGillivray's Warbler	<i>Oporornis tolmiei</i>	Clark's Nutcracker	<i>Nucifraga columbiana</i>
Common Yellowthroat	<i>Geothlypis trichas</i>	Common Crow	<i>Corvus brachyrhynchos</i>
Yellow-Breasted Chat	<i>Icteria virens</i>	Common Raven	<i>Corvus corax</i>
Wilson's Warbler	<i>Wilsonia pusilla</i>	Black-Capped Chickadee	<i>Parus atricapillus</i>
American Redstart	<i>Setophaga ruticilla</i>	Mountain Chickadee	<i>Parus gambeli</i>
House Sparrow	<i>Passer domesticus</i>	Dipper	<i>Cinclus mexicanus</i>
* Bobolink	<i>Dolichonyx oryzivorus</i>	White-Breasted Nuthatch	<i>Sitta carolinensis</i>
Western Meadowlark	<i>Sturnella neglecta</i>	Red-Breasted Nuthatch	<i>Sitta canadensis</i>
Yellow-Headed Blackbird	<i>Xanthocephalus xanthocephalus</i>	Brown Creeper	<i>Certhia familiaris</i>
Blackthroated Green Warbler	<i>Dendroica virens</i>		

BIRDS continued

Common Name	Scientific Name	Common Name	Scientific Name
House Wren	<i>Troglodytes aedon</i>	Green-Tailed Towhee	<i>Pipilo chlorurus</i>
Long-Billed Marsh Wren	<i>Cistothorus palustris</i>	Lark Bunting	<i>Calamospiza melanocorys</i>
Short-Billed Marsh Wren	<i>Cistothorus platensis</i>	Savannah Sparrow	<i>Passerculus sandwichensis</i>
Rock Wren	<i>Salpinctes obsoletus</i>	Baird's Sparrow	<i>Ammodramus bairdii</i>
Mockingbird	<i>Mimus polyglottus</i>	Le Conte's Sparrow	<i>Ammospiza leconteii</i>
Gray Catbird	<i>Dumetella carolinensis</i>	Sharp-Tailed Sparrow	<i>Ammospiza caudacuta</i>
Brown Thrasher	<i>Taxostoma rufum</i>	Vesper Sparrow	<i>Poocetes gramineus</i>
Sage Thrasher	<i>Oreoscoptes montanus</i>	Lark Sparrow	<i>Chondestes grammacus</i>
American Robin	<i>Turdus migratorius</i>	Dark-Eyed Junco	<i>Junco hyemalis</i>
Varied Thrush	<i>Ixoreus naevius</i>	Gray-Headed Junco	<i>Junco caniceps</i>
Wood Thrush	<i>Hylocichla mustelina</i>	Tree Sparrow	<i>Spizella arborea</i>
Hermit Thrush	<i>Catharus guttata</i>	Chipping Sparrow	<i>Spizella passerina</i>
Swainson's Thrush	<i>Catharus ustulata</i>	* Clay-Colored Sparrow	<i>Spizella pallida</i>
Gray-Cheeked Thrush	<i>Catharus minimus</i>	* Brewer's Sparrow	<i>Spizella breweri</i>
Veery	<i>Catharus fuscescens</i>	* Field Sparrow	<i>Spizella pusilla</i>
* Eastern Bluebird	<i>Sialia sialis</i>	* Harris' Sparrow	<i>Zonotrichia querula</i>
* Mountain Bluebird	<i>Sialia currucoides</i>	White-Crowned Sparrow	<i>Zonotrichia leucophrys</i>
* Western Bluebird	<i>Sialia mexicana</i>	White-Throated Sparrow	<i>Zonotrichia albicollis</i>
Townsend's Solitaire	<i>Myadestes townsendi</i>	Fox Sparrow	<i>Passerella iliaca</i>
Blue-Gray Gnatcatcher	<i>Poliophtila caerulea</i>	Lincoln's Sparrow	<i>Melospiza lincolni</i>
Golden-Crowned Kinglet	<i>Regulus satrapa</i>	Swamp Sparrow	<i>Melospiza georgiana</i>
Ruby-Crowned Kinglet	<i>Regulus calendula</i>	Song Sparrow	<i>Melospiza melodia</i>
Water Pipit	<i>Motacilla spinoletta</i>	McCown's Longspur	<i>Calcarius mccownii</i>
Sprague's Pipit	<i>Anthus spragueii</i>	Lapland Longspur	<i>Calcarius lapponicus</i>
Bohemian Waxwing	<i>Bombicilla garrulus</i>	Chestnut-Collared Longspur	<i>Calcarius ornatus</i>
		Snow Bunting	<i>Plectrophenax nivalis</i>

Common Name	Scientific Name	FISH	Common Name	Scientific Name
Paddlefish	<i>Polyodon spathula</i>		Channel Catfish	<i>Ictalurus punctatus</i>
Goldeye	<i>Hiodon alosoides</i>		Stone Cat	<i>Noturus flavus</i>
Lake Whitefish	<i>Coregonus clupeaformis</i>		Burbot (Ling)	<i>Lota lota</i>
° Rainbow Trout	<i>Salvelinus gairdneri</i>		Brook Stickleback	<i>Culaea inconstans</i>
° Brook Trout	<i>Salvelinus fontinalis</i>		° Pumpkinseed	<i>Lepomis gibbosus</i>
Northern Pike	<i>Esox lucius</i>		° Bluegill	<i>Lepomis macrochirus</i>
° Carp	<i>Cyprinus carpio</i>		° Largemouth Bass	<i>Micropterus salmoides</i>
Golden Shiner	<i>Notemigonus crysoleucas</i>		° White Crappie	<i>Pomoxis annularis</i>
Pearl Dace	<i>Semotilus margarita</i>		° Black Crappie	<i>Pomoxis nigromaculatus</i>
Northern Redbelly Dace	<i>Phoxinotus eos</i>		° Yellow Perch	<i>Perca flavescens</i>
Finescale Dace	<i>Phoxinus neogaeus</i>		Sauger	<i>Stizostedion canadense</i>
Flathead Chub	<i>Hybopsis gracilis</i>		° Walleye	<i>Stizostedion vitreum</i>
Lake Chub	<i>Couesius plumbeus</i>		Iowa Darter	<i>Etheostoma exile</i>
Emerald Shiner	<i>Notropis atherinoides</i>		Mottled Sculpin	<i>Cottus bairdi</i>
Brassy Minnow	<i>Hybognathus hankinsoni</i>		° Smallmouth Bass	<i>Micropterus dolomieu</i>
Silvery Minnow	<i>Hybognathus nuchalis</i>		Mountain Whitefish	<i>Prosopium williamsoni</i>
Flathead Minnow	<i>Pimephales promelas</i>		Freshwater Drum	<i>Aplodinotus grunniens</i>
Longnose Dace	<i>Rhinichthys cataractae</i>		Shovelnose Sturgeon	<i>Scaphirhynchus platyrhynchus</i>
River Carpsucker	<i>Carpoides carpio</i>		° Brown Trout	<i>Salmo trutta</i>
Smallmouth Buffalo	<i>Ictiobus bubalus</i>		° Goldfish	<i>Carassius auratus</i>
Bigmouth Buffalo	<i>Ictiobus cyprinellus</i>		Plains Minnow	<i>Hybognathus placitus</i>
Shorthead Redhorse	<i>Moxostoma macrolepidotum</i>		Blue Sucker	<i>Cycleptus elongatus</i>
Longnose Sucker	<i>Catostomus catostomus</i>		Mountain Sucker	<i>Catostomus platyrhynchus</i>
White Sucker	<i>Catostomus commersoni</i>		° Mosquitofish	<i>Gambusia affinis</i>
° Black Bullhead	<i>Ictalurus melas</i>		° White Bass	<i>Roccus chrysops</i>
			American Smelt	<i>Osmerus mordax</i>

° Introduced species.

APPENDIX 3.11 ESTIMATED POPULATION OF DEER, ANTELOPE AND ELK BY HUNTING UNIT ON
PUBLIC LANDS IN THE EIS AREA¹

Hunting Unit	Deer	Antelope	Elk
400	227	137	
401	217	95	49
402	9		
403	84		
404	26		
406	51		
600	524	1,279	
610	180	83	
611	1,282	880	
612	32		
620	785	416	
630	825	353	
640	32	19	
641	15	8	
670	3,530	1,360	
690	57	115	
691	65		
733	76	9	
TOTAL	8,017	4,754	49

1. Montana Department of Fish, Wildlife and Parks and BLM winter surveys from 1972-1979.

The management of prairie dog habitats on public lands in Montana, administered by the Bureau of Land Management (BLM), is a controversial issue because of the conflicting interests of a concerned public. More than 100 public comments were received in response to a draft Habitat Management Plan for the Prairie Dog Ecosystem distributed by BLM. This document was widely reviewed by citizens, private organizations and public agencies throughout the United States. Comments ranged from those favoring total preservation of prairie dogs to those advocating large scale population reductions.

BLM policy for managing prairie dog habitat was formulated after careful review of all public comments received, and consideration of applicable Federal and state laws and regulations. This policy is intended to be responsive to those comments and to BLM's legal mandate.

The Bureau recognizes the authority of the State of Montana for management of resident wildlife species, including prairie dogs. Any population management on public land will be accomplished in cooperation with the appropriate state agencies.

All prairie dog towns on public land will be inventoried and examined for presence of associated wildlife species including threatened or endangered species. The Bureau will cooperate where feasible with other agencies, universities and private groups to accomplish inventories and ecological studies.

The BLM recognizes the prairie dog ecosystem as an integral part of the prairie environment and its perpetuation should be consistent with multiple use management of public lands. The following policies shall apply in this regard:

1. Selected prairie dog towns will be maintained at a determined level to support a viable population of prairie dogs for public use. Public uses include nature study, scientific research, photography, educational study and sport hunting.
2. Selected prairie dog towns will be maintained at a determined level to provide habitats for associated wildlife species. Prairie dog towns are used by more than 20 wildlife species of which 6 have been designated as species of special concern by Montana Department of Fish, Wildlife and Parks.
3. Selected prairie dog towns will be maintained at a determined level to provide habitat for species designated as threatened or endangered by Federal and state laws. Currently, the black-footed ferret is the only endangered species known to be associated with prairie dog towns, which are primary habitat for this mammal. Prairie dog towns on public lands will be maintained to support at least one wild self-sustaining population of ferrets in Montana as prescribed by the Fish and Wildlife Service's Black-Footed Ferret Recovery Plan.

Although some prairie dog towns may be managed primarily for wildlife and recreational values, others not selected for these purposes will be subject to multiple use management. Where prairie dogs are reported to damage public and adjoining private rangelands the following policy shall apply:

1. Where it has been documented through field investigation that prairie dogs cause unacceptable damage to public resources, such as soil loss or destruction of vegetation, a variety of land treatments including prairie dog control will be considered for rehabilitating rangelands. Other treatments may include such practices as watershed improvements and manipulation of livestock grazing. Prairie dog control will be carried out by appropriate state and Federal agencies using techniques recommended by them and approved by BLM. Sport hunting of prairie dogs, as permitted under state law, is recognized as a legitimate recreational use of public lands; hunters may be directed to towns approved for control.
2. Before control plans for any prairie dog towns can be approved by BLM, each town must be intensively inventoried for threatened and endangered species. If such species are present, any proposal for control must clearly demonstrate that prairie dog control will not jeopardize the continued existence of the species or destroy or adversely modify its habitat.
3. All approved control plans will be fully coordinated with appropriate state and Federal agencies.

The BLM recognizes implementing this policy will require close coordination with Federal and state agencies and private landowners. These include, but are not limited to, Montana Department of Fish, Wildlife and Parks, Montana Department of Livestock, United States Fish and Wildlife Service, livestock operators on public lands, and private landowners whose property adjoins public land.

Source: BLM, 1980.

The first step in the process involved matching each allotment in the EIS study area with the respective ranch operation. Some ranch operations have only one BLM grazing allotment, others have a number of allotments involving existing allotment management plans (AMPs) or proposed AMPs and non-AMPs.

There is a total of 637 individual ranch operations with BLM grazing privileges in the study area. Seventy-nine of these 637 ranches have 25 or fewer BLM AUMs. The BLM AUMs are virtually unimportant to these ranches, so the analysis concentrates on the 558 remaining ranch operations.

Through the use of BLM grazing records, personal knowledge of Lewistown District BLM employees, Agricultural Stabilization and Conservation Service (ASCS) crop records and discussions with ranch permittees, the 558 ranches were placed in 12 size-and-type categories (Table 3.27). The predominate type of ranch is a cow/calf operation. Also, as indicated on Table 3.27, many of the operations also produce cash crops, primarily wheat.

To determine dependency of ranches on BLM grazing, the total AUM grazing requirement for the ranches was computed. This was accomplished by multiplying 7.5 times the total estimated number of animal units (AU) in each ranch. Seven and one-half was used because it is estimated that, on the average, ranch operations in the EIS study area graze seven and one-half months and feed hay and supplement the other four and one-half months. To determine the percentage of dependency of each operation on BLM grazing, the number of BLM AUMs permitted was divided by the total ranch AUM requirements. Table 3.26 summarizes these determinations: Percentage dependency = BLM AUMs divided by (7.5 months x number of ranch AUMs).

The number of livestock on ranches within each size category was averaged. Results of the averaging indicated the following: 0-100 cows, average 60 cows; 101-249 cows, average 170 cows; 250-499 cows, average 350 cows and 500 plus cows, average 900 cows.

Ranch budgets were constructed for each of the four average size ranches. Two representative crop enterprise budgets were developed for those farms/ranches having cash crops. The crop budgets are for producing hard red winter wheat following fallow for 320 acres representing the medium cash crop and 1,220 acres representing the large cash crop.

The Economics and Statistics Service (USSA, ESS) developed the representative budgets, using, in part, budget data gathered in a national cost of production study in 1979. This data was supplemented by location information gathered by BLM regarding such production items as calf crops, calf weaning weights, forage requirements, etc. (Cornelius, 1977). The BLM gathered this type of data by contacting a cross section of ranches, county agents, agricultural loan officers and other people associated with agriculture in Valley, Phillips, Blaine and Hill Counties. Information provided by these people was analyzed by BLM to arrive at, for example, the average weaning weights for heifers and steers in the study area. Tables 1 through 7 summarize the representative livestock and crop budgets.

A linear programming model was developed by ESS for each of four livestock sizes. The linear programming model maximizes ranch income based on a series of production parameters and constraints. To determine the economic impacts on the ranch, the level of BLM grazing was varied (increased, decreased or eliminated) according to the proposed change in BLM AUMs under each alternative. For example, under the no grazing alternative, 100 percent of the BLM AUMs are eliminated from the representative ranch.

It was assumed that the most likely response of ranchers to changes in BLM AUMs would be to adjust the size of the ranch operation. It is, of course, very difficult to project how ranchers would adjust their operations given a change in BLM AUMs. Each ranch operation is unique, and the adjustment by each rancher to a change in BLM AUMs would probably vary somewhat. Small ranches would probably be less likely to reduce the size of their operations and would probably purchase hay, for example, to compensate for the loss of BLM grazing. If BLM increased the number of AUMs, ranchers would not necessarily increase the size of their cow/calf operations. They might, run more yearlings, for example. Notwithstanding these problems, it was decided that adjusting the size of the cow/calf operations would represent the most likely response to a change in BLM AUMs.

The impact on ranch income is measured only in terms of change in the number of BLM AUMs. It is acknowledged that where an AMP is involved, there may be changes in ranch returns associated with the quality of grazing, watering facilities, etc., that do not directly relate to the change in quantity of AUMs. Through vegetation manipulation, fencing, water development, and rest rotation grazing on BLM land, a ranch operator could benefit from the production of heavier calves, an increase in the calf crop, and possibly even a reduction in death losses. Some of these benefits have been noted by W. Gordon Kears (1973) and Kothmann (1970). It is entirely possible that a ranch operator, even though he reduces the size of his herd, could end up selling more pounds of beef in the fall because of the benefits from implementation of an AMP. Not enough data are available at this time in the study area to conclusively quantify the extent of these additional ranch returns due to AUM quality so they were not evaluated in the analysis.

Implementation of grazing systems would increase the cost to ranch operations in such areas as increased fence maintenance, more movement of livestock and increased effort in monitoring forage conditions. These costs are included in the budget models.

Using the linear programming model, then, the change in ranch income (gross receipts about cash costs and depreciation), was calculated given a change in BLM AUMs. Since, in the study area, private and state lands are intermingled with BLM lands, a reduction in BLM grazing can cause a reduction in private and state grazing. During the time that BLM lands are being grazed, BLM lands contribute on the average about two-thirds of the grazing whereas state and private lands contribute about one-third. Therefore, in the calculations, grazing on state and private lands are reduced proportionally. Increase in BLM AUMs is not accompanied with a proportional increase in state and private AUMs since BLM does not know that grazing would be increased on these lands. Tables 8 through 16 summarize the income increases/decreases given various increases/decreases in BLM AUMs.

It is interesting to note the decreases in income per AUM under various decreases in BLM and associated state and private AUMs. For example, with a 30 percent decrease in BLM AUMs and the associated state and private AUMs, income (gross receipts above cash cost and depreciation) on a 60 cow ranch would decrease \$9.66 per AUM. The loss in forage value to the nation amounts to \$12.02 per AUM (\$9.66 + \$2.36 (1980 grazing fee) = \$12.02). A 15 percent increase in BLM AUMs for the same size ranch would increase ranch income \$5.17 per AUM. The increase to the nation in forage value would be \$7.53 (\$5.17 + \$2.36 = \$7.53). The decrease per AUM is greater than the increase largely because of cost structure. Ranches have a certain amount of fixed costs that are not reduced proportionally with reduced AUMs. They must continue to pay these fixed costs at least in the short term.

Also of interest, is to compare this forage value for an AUM with the fair market value as determined by the ESS. In Montana the average monthly rate per head for pasturing cattle on private land in 1980 was \$9.40 (USSA, ESS, 1980, Farm Real Estate Market Developments). This is very close to the value arrived at through linear programming and it tends to support the data and approach used in the analysis.

Ranchers, BLM appraisers and the Federal Land Bank estimate that an average value for BLM grazing permits in the intensive study area is approximately \$100 per AUM. For those ranchers that have purchased BLM permits at \$100 per AUM or \$1,200 per AU, it is possible to calculate the price they are paying for BLM AUMs. Using an opportunity cost of capital of 9.3 percent, the cost of owning the BLM permit is \$9.30 per AUM. Adding the grazing fee of \$2.36 results in a total price per AUM of \$11.66.

TABLE 3

Montana - Prairie Pothole		EIS Area		101-249 Cows	
Unit	Number	Average Weight	Price/Cwt	Total Value	
Sales:					
Steer Calves	Head	69	450	71.23	22,117
Heifer Calves	Head	43	410	62.82	11,075
Feeder Steers	Head	8	725	59.02	3,423
Cull Cows	Head	31	1,000	36.99	11,467
Total					48,082
Total/Cow					282.84
Cash Costs:					
BLM Permit				Total Value	Value/Head
State Lease				722	4.25
Private Lease				39	.23
Grazing Assoc.				1,422	8.37
Hay (Prod)				248	1.46
Hay (Purch)				8,384	49.32
Barley (Prod)				1,576	9.27
Protein Suppl				266	1.57
Salt & Minerals				490	2.88
Vet. & Medicine				451	2.65
Trucking				903	5.31
Marketing				332	1.95
Hired Labor				697	4.10
Machine Fuel & Lube				746	4.39
Machine Repair				1,513	8.90
Equipment Fuel & Lube				1,338	7.87
Equipment Repair				253	1.49
Land Tax				502	2.99
Other Tax				1,464	8.61
Insurance				262	1.54
General Farm Overhead				723	4.25
Interest on Oper. Capital				1,255	7.38
Total				1,262	7.42
Other Costs:				24,848	146.17
Family Labor				5,464	32.14
Depreciation				4,667	27.45
Interest on Investment other than Land				10,311	60.65
Interest on Land Investment				34,005	200.03
Total				54,447	320.27
Total all costs				79,295	466.44
Return above Cash Costs				23,234	136.67
Return above Cash Costs & Family Labor				17,770	104.53
Return to Land Investment				15,103	77.08
Return to Land Investment				2,792	16.42

Production Assumptions - herd size 170 cows; 95% calf crop; 5% calf death loss to weaning; 25 cows per bull; 20% replacement rate; 2% cow loss.

Source: ESS, 1980.

TABLE 4

MONTANA PRAIRIE POTHOLE		EIS Area		250-499 Cows	
Unit	Number	Average Weight	Price/Cwt	Total Value	
Sales:					
Steer Calves	Head	142	450	71.23	45,516
Heifer Calves	Head	88	410	62.82	22,665
Feeder Steers	Head	16	725	59.02	6,846
Cull Cows	Head	63	1,000	36.99	23,304
Total					98,332
Total/Cow					280.95
Cash Costs:					
BLM Permit				Total Value	Value/Head
State Lease				1,856	5.30
Private Lease				222	.63
Grazing Assoc.				819	2.34
Hay (Prod)				510	1.46
Hay (Purch)				17,450	49.86
Barley (Prod)				3,203	9.15
Protein Suppl				545	1.56
Salt & Minerals				1,009	2.88
Vet. & Medicine				945	2.70
Trucking				1,676	4.79
Marketing				473	1.35
Hired Labor				592	1.69
Machine Fuel & Lube				3,262	9.32
Machine Repair				2,331	6.66
Equipment Fuel & Lube				2,335	6.67
Equipment Repair				585	1.67
Land Tax				1,047	2.99
Other Tax				2,919	8.34
Insurance				473	1.35
General Farm Overhead				1,470	4.20
Interest on Oper. Capital				2,342	6.69
Total				2,465	7.04
Other Costs:				48,529	138.65
Family Labor				12,000	34.29
Depreciation				9,027	25.79
Interest on Investment other than Land				20,910	59.74
Interest on Land Investment				69,034	197.24
Total				110,971	317.06
Total all costs				159,500	455.71
Return above Cash Costs				49,803	142.29
Return above Cash Costs & Family Labor				37,803	108.01
Return to Land Investment				28,776	82.22
Return to Land Investment				7,866	22.47

Production Assumptions - herd size 350 Cows; 95% calf crop; 5% calf death loss; 20 cows per bull; 20% replacement rate; 2% cow loss.

Source: ESS, 1980.

TABLE 5

Montana - Prairie Pothole		EIS	Area	500+ Cows	
Unit	Number		Average Weight	Price/Cwt	Total Value
Sales:					
Steer Calves	Head	365	450	71.23	116,995
Weifer Calves	Head	226	410	62.82	58,209
Feeder Steers	Head	41	725	59.02	17,544
Cull Cows	Head	162	1,000	36.99	59,924
Total					252,672
Total/Cow					280.75
				Total Value	Value/Head
Cash Costs:					
BLM Permit			3,727	4.14	
State Lease			202	.22	
Private Lease			1,278	1.42	
Grazing Association			1,305	1.45	
Hay (Prod)			44,774	49.75	
Hay (Purch)			8,239	9.15	
Barley (Prod)			1,410	1.57	
Protein Supp.			2,595	2.88	
Salt & Minerals			2,430	2.70	
Vet. & Medicine			4,311	4.79	
Trucking			1,215	1.35	
Marketing			1,521	1.69	
Hired Labor			8,388	9.32	
Machine Fuel & Lube			5,994	6.66	
Machine Repair			6,003	6.67	
Equipment Fuel & Lube			1,503	1.67	
Equipment Repair			2,691	2.99	
Land Tax			7,606	8.34	
Other Tax			1,215	1.35	
Insurance			3,780	4.20	
General Farm Overhead			6,021	6.69	
Interest on Oper. Capital			6,212	6.90	
Total			122,320	135.91	
Other Costs:					
Family Labor			17,028	18.92	
Depreciation			23,211	25.79	
Interest on Investment other than Land			53,784	59.76	
Interest on Land Investment			208,008	231.12	
Total			302,031	335.59	
Total all Costs			424,351	471.50	
Return above Cash Costs			130,352	144.84	
Return above Cash Costs & Family Labor			113,324	125.92	
Return to Total Investment			90,113	100.13	
Return to Land Investment			36,329	40.37	

Production Assumptions - Herd size 900 cows; 95% calf crop; 5% calf death loss to weaning; 20 cows per bull; 20% replacement rate; 2% cow loss.

Source: ESS, 1980.

TABLE 6

MONTANA - Hard red winter wheat following fallow

Item	Unit	Price/unit	Quantity	Value/acre
Sales:				
Wheat	Bu	2.75	30.7	84.42
Straw	Tn	40.50	.07	2.83
Total Receipts				87.26
Cash Costs:				
Preharvest:				
Fungicide				.03
Herbicide				1.86
Insecticide				.05
Seed				3.68
Nitrogen				2.69
Phosphate				2.14
Pesticide Appl.				.36
Tractor fuel and lube				2.48
Tractor repairs				1.62
Machine fuel and lube				.87
Machine repairs				2.65
Machine labor				3.86
Harvest:				
Baler twine-wire				.15
Custom combine and haul				2.62
Tractor fuel and lube				.09
Tractor repairs				.06
Machine fuel and lube				.90
Machine repairs				1.46
Machine labor				1.51
Taxes				1.32
Insurance				.76
Gen. farm overhead				5.18
Interest on Oper capital				1.94
Total cash costs:				38.28
Other costs:				
Depreciation				16.14
Interest on investment				
other than land				7.13
Total other costs:				23.27
Total all costs:				61.55
Return above cash costs:				48.98
Return to total investment				32.94
Return to land				25.71

Acres represented = 1219

Source: ESS, 1980.

TABLE 7

Item	Unit	Price/unit	Quantity	Value/Acre
Sales:	:	:	:	:
Wheat	Bu	2.95	28.0	82.60
Total Receipts	:	:	:	82.60
Cash Costs:	:	:	:	:
Preharvest:	:	:	:	:
Insecticide	:	:	:	.07
Herbicide	:	:	:	.99
Seed	:	:	:	3.46
Nitrogen	:	:	:	3.21
Phosphate	:	:	:	2.56
Fertilizer Appl.	:	:	:	.21
Tractor fuel and lube	:	:	:	1.76
Tractor repairs	:	:	:	1.13
Machine fuel and lube	:	:	:	.88
Machine repairs	:	:	:	2.11
Machine labor	:	:	:	3.38
Harvest:	:	:	:	:
Custom combine and haul	:	:	:	2.61
Machine fuel and lube	:	:	:	.83
Machine repairs	:	:	:	1.33
Machine labor	:	:	:	1.07
Taxes	:	:	:	1.05
Insurance	:	:	:	.62
Gen. farm overhead	:	:	:	5.18
Interest on Oper Capital	:	:	:	2.32
Total Cash Costs:	:	:	:	34.79
Other Costs:	:	:	:	:
Depreciation	:	:	:	12.83
Interest on Investment	:	:	:	:
other than land	:	:	:	5.55
Total other costs:	:	:	:	18.38
Total all costs:	:	:	:	53.17
Return above cash costs	:	:	:	47.81
Return to total investment	:	:	:	34.98
Return to land	:	:	:	29.43

Acres represented 320

Source: ESS, 1980.

TABLE 8

TABLE 8--Montana Prairie Pothole EIS area less than 100 cows

Item	Percent reduction									
	no change	5	10	15	20	25	30	35	40	45 50
	Dollars									
Gross income	16,974	16,596	16,214	15,837	15,457	15,075	14,673	14,294	13,911	13,534 13,187
Total cash costs	12,355	12,071	11,785	11,502	11,217	10,969	10,722	10,488	10,252	10,019 9,807
Value of family labor	2,350	2,298	2,245	2,193	2,140	2,087	2,032	1,979	1,926	1,874 1,826
Depreciation	1,785	1,777	1,769	1,761	1,753	1,745	1,736	1,728	1,721	1,712 1,705
Interest on investment other than land	3,767	3,698	3,628	3,560	3,490	3,421	3,348	3,279	3,209	3,141 3,078
Return above:										
Cash costs	4,619	4,525	4,429	4,335	4,240	4,106	3,951	3,806	3,659	3,515 3,380
Cash costs and family labor	2,269	2,227	2,184	2,142	2,100	2,019	1,919	1,827	1,733	1,641 1,554
Return to total investment	484	450	415	381	347	274	183	99	12	71 151
Return to land	-3,283	-3,248	-3,213	-3,179	-3,143	-3,147	-3,165	-3,180	-3,197	-3,212 -3,229
Herd size	60.2	58.9	57.5	56.2	54.8	53.5	52.1	50.7	49.4	48.0 46.8

Source: ESS, 1980.

TABLE 8 --(cont) Montana Prairie Pothole EIS Area less than 100 cows

Item	Percent Increase		
	5	10	15
	<u>Dollars</u>		
Gross income	17,304	17,638	17,969
Total cash costs	12,636	12,921	13,204
Value of family labor	2,396	2,442	2,488
Depreciation	1,792	1,800	1,807
Interest on investment other than land	3,827	3,888	3,948
Return above:			
Cash costs	4,668	4,717	4,765
Cash costs and family labor	2,272	2,275	2,277
Return to total investment	480	475	470
Return to land	-3,347	-3,413	-3,478
Herd size	61.4	62.6	63.8

Source: ESS, 1980.

TABLE 9 --Montana Prairie Pothole EIS Area 100-249 cows

Item	Percent reduction										
	no change	5	10	15	20	25	30	35	40	45	50
<u>Dollars</u>											
Gross income	47,939	47,078	45,967	45,067	44,143	43,243	42,343	41,208	40,308	39,384	38,484
Total cash costs	32,700	32,093	31,303	30,666	30,013	29,376	28,843	28,190	27,673	27,144	26,628
Value of family labor	5,448	5,350	5,223	5,122	5,017	4,914	4,812	4,683	4,581	4,476	4,374
Depreciation	4,664	4,645	4,622	4,603	4,584	4,564	4,545	4,521	4,502	4,483	4,463
Interest on investment other than land	10,286	10,132	9,932	9,771	9,605	9,444	9,282	9,079	8,918	8,752	8,591
Return above:											
Cash costs	15,239	14,985	14,664	14,401	14,130	13,867	13,500	13,018	12,635	12,240	11,856
Cash costs and family labor	9,791	9,635	9,441	9,279	9,113	8,953	8,688	8,335	8,054	7,764	7,482
Return to total investment	5,127	4,990	4,819	4,676	4,529	4,389	4,143	3,814	3,552	3,281	3,019
Return to land	-5,159	-5,142	-5,113	-5,095	-5,076	-5,055	-5,139	-5,265	-5,366	-5,471	-5,572
Herd size	169.9	166.5	162.5	159.4	156.1	152.9	149.7	145.7	142.5	139.3	136.1

Source: ESS, 1980.

TABLE 9 --(cont) Montana Prairie Pothole EIS Area 100-249 cows

Item	Percent Increase		
	5	10	15
	<u>Dollars</u>		
Gross income	48,756	49,500	50,244
Total cash costs	33,366	33,973	34,580
Value of family labor	5,541	5,625	5,710
Depreciation	5,681	4,697	4,713
Interest on investment other than land	10,432	10,566	10,699
Return above:			
Cash costs	15,390	15,527	15,664
Cash costs and family labor	9,849	9,902	9,954
Return to total investment	4,168	5,205	5,241
Return to land	-6,264	-5,361	-5,458
Herd size	172.4	175.0	177.7

Source: ESS, 1980.

TABLE 10 --Montana Prairie Pothole EIS Area 250-499 Cows

Item	Percent reduction									
	no change	5	10	15	20	25	30	35	40	45 50
	<u>Dollars</u>									
Gross income	98,249	96,727	93,930	91,573	89,401	87,253	85,106	82,934	80,577	78,405 76,258
Total cash costs	64,740	63,661	61,665	59,984	58,441	57,086	55,846	54,598	53,236	51,987 50,747
Value of family labor	11,991	11,806	11,464	11,176	10,911	10,649	10,387	10,122	9,834	9,569 9,307
Depreciation	9,025	8,984	8,909	8,847	8,789	8,731	8,674	8,616	8,553	8,495 8,438
Interest on investment other than land	20,895	20,619	20,113	19,687	19,294	18,905	18,516	18,123	17,697	17,304 16,915
Return above:										
Cash costs	33,509	33,066	32,265	31,589	30,960	30,167	29,260	28,336	27,341	26,418 25,511
Cash costs and family labor	21,518	21,260	20,801	20,413	20,049	19,518	18,873	18,214	17,507	16,849 16,204
Return to total investment	12,493	12,276	11,892	11,566	11,260	10,787	10,199	9,598	8,954	8,354 7,766
Return to land	-8,402	-8,343	-8,221	-8,121	-8,034	-8,118	-8,317	-8,525	-8,743	-8,950 -9,149
Herd size	349.7	344.2	334.3	325.9	318.2	310.6	302.9	295.2	286.8	279.1 271.4

Source: ESS, 1980.

TABLE 10 (cont.) Montana Prairie Pothole EIS Area 250-499 Cows

Item	Percent Increase		
	5	10	15
	<u>Dollars</u>		
Gross income	100,210	102,171	104,378
Total cash costs	66,343	67,946	69,749
Value of family labor	12,231	12,470	12,739
Depreciation	9,077	9,129	9,188
Interest on investment other than land	21,250	21,605	22,004
Return above:			
Cash costs	33,867	34,225	34,629
Cash costs and family labor	22,636	21,755	21,890
Return to total investment	12,559	12,625	12,702
Return to land	-8,691	-8,979	-9,302
Herd size	356.7	363.7	371.5

Source: ESS, 1980.

TABLE 11 --Montana Prairie Pothole EIS Area 500+ Cows

Item	Percent reduction										
	no change	5	10	15	20	25	30	35	40	45	50
<u>Dollars</u>											
Gross income	252,200	247,067	242,079	236,884	231,920	226,932	221,736	216,749	211,553	206,566	201,394
Total cash costs	163,916	160,288	156,766	153,093	149,587	146,065	143,085	140,240	137,272	134,427	131,473
Value of family labor	16,996	16,650	16,313	15,963	15,629	15,293	14,943	14,606	14,256	13,920	13,572
Depreciation	23,198	23,061	22,928	22,789	22,656	22,523	22,384	22,251	22,112	21,979	21,841
Interest on investment other than land	53,697	52,767	51,863	50,922	50,023	49,119	48,178	47,275	46,333	45,430	44,493
Return above:											
Cash costs	88,284	86,779	85,313	83,791	82,333	80,867	78,651	76,509	74,261	72,139	69,921
Cash costs and family labor	71,288	70,129	69,000	67,828	66,704	65,574	63,708	61,903	60,025	58,219	56,349
Return to total investment	46,090	47,068	46,072	45,039	44,048	43,051	41,324	39,652	37,913	36,240	34,508
Return to land	-5,607	-5,699	-5,791	-5,883	-5,975	-6,068	-6,164	-6,263	-6,362	-6,462	-6,562
Herd size	898.3	880.0	862.2	843.7	826.0	808.3	789.8	772.0	753.5	735.7	717.3

Source: ESS, 1980.

TABLE 11 --(cont) Montana Prairie Pothole EIS Area 500+ cows

Item	Percent Increase		
	5	10	15
<u>Dollars</u>			
Gross income	256,194	260,359	264,279
Total cash costs	167,182	170,588	173,794
Value of family labor	17,265	17,545	17,809
Depreciation	23,305	23,416	23,521
Interest on investment other than land	54,420	55,175	55,885
Return above:			
Cash costs	89,012	89,771	90,485
Cash costs and family labor	71,747	72,226	72,676
Return to total investment	48,442	48,810	49,155
Return to land	-5,978	-6,365	-6,730
Herd size	912.5	927.3	941.3

Source: ESS, 1980.

TABLE 12 Adjustments in income and herd size with a 100 percent reduction in BLM forage, Prairie Pothole EIS area.

Item	<u>Herd Size (cows)</u>			
	<u>0-100</u>	<u>101-249</u>	<u>250-499</u>	<u>500+</u>
	<u>Dollars</u>			
Gross income	9,587	28,967	49,663	150,709
Total cash costs	10,343	29,017	51,904	144,142
Family labor	1,327	3,292	6,061	10,156
Depreciation	1,628	4,262	7,728	20,487
Interest on investment other than land	2,422	6,884	12,103	35,311
Return above:				
Cash costs	-756	-50	-2,241	6,567
Cash costs and family labor	-2,083	-3,342	-8,302	-3,589
Return to total investment	-3,711	-7,604	-16,030	-24,076
Return to land	-6,133	-14,488	-28,133	-59,387
Herd size	34	102.4	176.8	536.8

Source: ESS, 1980.

Impacts

Due to data limitations, it is only possible to quantify the economic implications of hunting deer, antelope and waterfowl that use public lands. The current number of animals and expected changes under each alternative are specified in Appendix 3.4 and Appendix 3.16. These figures have been adjusted to reflect the intensive study area (ISA) only.

Increases in hunting are assumed to be proportional to increases in wildlife populations; therefore, for example, if the deer population increases, the number of deer harvested would be expected to increase. The annual average rate of harvest will continue to be .15 for deer, .20 for antelope and .05 for ducks and geese. (The figure for waterfowl estimates the percentage harvested in the ISA of those fledged in the ISA.) It is further assumed that the hunting effort required to bag one animal will remain constant at 7.5 days for deer, 3 days for antelope, 3 days for geese and .5 day for ducks.

The assumption is made that the location from which hunters in the ISA originate will remain constant. For deer hunters it is estimated that 4.5 percent are from out of state, 15 percent are residents but from outside the ISA and 80.5 percent are from the ISA. For antelope hunters it is estimated that 3.3 percent are from out of state, 20 percent are residents but from outside the ISA and 76.7 percent are from the ISA. This distinction is not made for waterfowl hunters.

The estimated expenditure per day for non-resident deer and antelope hunters is \$75. It is assumed that this total amount will be spent in the ISA for those non-residents whose destination is the ISA. This is based on the assumption that non-resident expenditures outside the ISA but in Montana would be offset by expenditures of non-residents in the ISA whose destination is to other areas in Montana.

The estimated expenditures per day for resident deer and antelope hunters in Montana is \$29. According to a study in Colorado, 32 percent of the deer and antelope hunters' expenditures are variable whereas 68 percent are fixed. (Fixed expenditures include clothing and equipment and are usually purchased in the place of residence. Variable expenditures, which include daily purchases such as gas, lodging and food are usually purchased in the hunting location.) It is assumed that this percentage is applicable to Montana and that all variable expenditures are spent in the hunting location whereas all fixed expenditures are spent in the place of residence.

It is further assumed that the variable expenditures by residents of the ISA would be made outside the ISA if it were not for the deer and antelope resource within the ISA. In this sense, the variable expenditures within the ISA represent new money; that is, a loss avoided. Fixed expenditures by residents in the ISA are not counted since these purchases would probably be made in the ISA regardless of local hunting opportunities.

The estimated expenditure for waterfowl hunting is \$18 per day. It is assumed that all waterfowl hunters are residents and that 25 percent of their expenditures are variable and therefore spent in the ISA.

The expenditure calculations, current expenditures for each species and, increases in expenditures by species by alternative are shown on the following tables. All sources are cited on the tables. There are no short term changes projected for geese or duck populations under any alternative. See Appendix 3.16 for the methodology used to translate expenditures into gross output, earnings and employment.

ESTIMATED AVERAGE HUNTER EXPENDITURES

Animal	Non-resident Expenditures per Day	Percent of Total Hunters who are Non-residents	Resident Expenditures Per Day	Percentage of Resident Hunters who are from Outside the ISA	Percentage of Resident Hunters who are from the ISA	Percentage of Total Expenditures that are Variable
Deer	\$75	4.5% ^a	\$29 ^b	15.0% ^a *	80.5%	32%
Antelope	\$75	3.3% ^a	\$29 ^b	20.0% ^a	76.7%	32%
Waterfowl	-	-	\$18 ^c	-	-	25%

Calculations of Average Expenditures Per Hunter Day

Deer	$(75 \times .045) + (29 \times .15 \times 32) + (29 \times .805 \times .32) = \12.2
Antelope	$(75 \times .033) + (29 \times .20 \times 32) + (29 \times .767 \times .32) = \11.4
Waterfowl	$\$18 \times .25 = 4.5$

* This figure represents an average of 20% for mule deer and 10% for whitetail deer.

Sources: ^a Dick Truend, Montana Department of Fish, Wildlife and Parks, 1980.

^b Economic Survey: 1960, Montana Department of Fish and Game; Adjusted by Consumer Price Index to 1979 prices.

^c 1975 National Survey of Hunting, Fishing and Wildlife - Associated Recreation Conducted for U.S. Department of the Interior, Fish and Wildlife Service by National Analysis, Division of Booz, Allen & Hamilton, Inc.

^d A Survey of Sportsmen Expenditures for Hunting and Fishing in Colorado, 1968 CO Division of Game, Fish & Parks, 1970.

HUNTER DAYS AND EXPENDITURES FOR WILDLIFE/RECREATION
IN THE INTENSIVE STUDY AREA FOR THE CURRENT SITUATION

Animal	Current Population	% Animals Harvested	Number Animals Harvested	Hunter Days Required to Harvest One Animal	Total # Harvest Days	Average Expenditure per Day	Total Expenditures
Deer	7,245	.15 ^a	1,087	7.5 ^c	8,153	12.2	99,467
Antelope	4,495	.20 ^a	899	3 ^c	2,697	11.4	30,746
Ducks	34,800	.05 ^b	1,740	0.5 ^d	870	4.5	3,915
Geese	1,100	.05 ^b	55	3 ^a	165	4.5	743
Total							134,871

Sources: ^a Dick Trueblood, Montana Department of Fish, Wildlife and Parks, 1980.

^b Don Childress, Montana Department of Fish, Wildlife and Parks, 1980.

^c Big Game Harvest Survey, 1973-79, Montana Department of Fish, Wildlife and Parks, 1980.

^d Prairie Potholes Waterfowl and Fisheries Habitat Management Plan of North Central Montana, RLM, 1978.

INCREASED HUNTER DAYS AND EXPENDITURES FOR DEER IN THE INTENSIVE STUDY AREA BY ALTERNATIVE

Short Term

Alternative	Change from Existing Population	Additional # of Animals	% Animals Harvested	Additional # Animals Harvested	Hunter Days Req. to Harvest One Animal	Additional Hunter Days	Average Daily Expenditure	Additional Total Annual Expenditure
A	0	0	.15	0	7.5	0	\$12.2	\$ 0
B	0	0	.15	0	7.5	0	\$12.2	0
C	0	0	.15	0	7.5	0	\$12.2	0
D	0	0	.15	0	7.5	0	\$12.2	0
E	3x	14,490	.15	2,174	7.5	16,305	\$12.2	198,921
F	0	0	.15	0	7.5	0	\$12.2	0

Long Term

A	2x	7,245	.15	1,087	7.5	8,153	\$12.2	99,467
B	2x*	4,661	.15	699	7.5	5,243	\$12.2	63,965
C	1.5x	3,623	.15	543	7.5*	4,073	\$12.2	49,691
D	3x	14,490	.15	2,174	7.5	16,305	\$12.2	198,921
E	3x	14,490	.15	2,174	7.5	16,305	\$12.2	198,921
F	0	0	.15	0	7.5	0	\$12.2	0

* On existing and proposed AMPs only

Source: RLM, 1980.

INCREASED HUNTER DAYS AND EXPENDITURES FOR ANTELOPE IN THE INTENSIVE STUDY AREA BY ALTERNATIVE

Alternative	Short Term							
	Change from Existing Population	Additional # of Animals	% Animals Harvested	Additional # Animals Harvested	Hunter Days Rec. to Harvest One Animal	Additional Hunter Days	Average Daily Expenditure	Additional Total Annual Expenditure
A	0	0	.20	0	3	0	\$11.4	\$ 0
B	0	0	.20	0	3	0	\$11.4	0
C	0	0	.20	0	3	0	\$11.4	0
D	0	0	.20	0	3	0	\$11.4	0
E	3x	8,990	.20	1,798	3	5,394	\$11.4	61,492
F	0	0	.20	0	3	0	\$11.4	0

Long Term								
A	2x	4,495	.20	899	3	2,697	\$11.4	30,746
B	2x*	2,219	.20	444	3	1,332	\$11.4	15,185
C	1.5x	2,248	.20	450	3	1,350	\$11.4	15,390
D	3x	8,990	.20	1,798	3	5,394	\$11.4	61,492
E	3x	8,990	.20	1,798	3	5,394	\$11.4	61,492
F	0	0	.20	0	3	0	\$11.4	0

* On existing and proposed ANPs only

Source: SLM, 1980.

INCREASED HUNTER DAYS AND EXPENDITURES FOR DUCKS AND GESE IN THE INTENSIVE STUDY AREA BY ALTERNATIVE
IN THE LONG TERM

Alternative	Additional # of Animals Fledged	% Harvested	Additional # Animals Harvested	Hunter Days Required to Harvest One Animal	Additional Hunter Days	Average Daily Expenditure	Additional Total Annual Expenditure
Ducks							
A	39,800	.05	1,990	.5	995	\$4.5	\$ 4,878
B	7,600	.05	380	.5	190	\$4.5	855
C	39,800	.05	1,990	.5	995	\$4.5	4,478
D	123,200	.05	6,160	.5	3,080	\$4.5	13,860
E	100,100	.05	5,005	.5	2,503	\$4.5	11,264
F	0	.05	0	.5	0	\$4.5	0
Geese							
A	2,350	.05	118	3	354	\$4.5	1,593
B	1,060	.05	53	3	159	\$4.5	716
C	2,350	.05	118	3	354	\$4.5	1,593
D	2,350	.05	118	3	354	\$4.5	1,593
E	0	.05	0	3	0	\$4.5	0
F	0	.05	0	3	0	\$4.5	0

* No short term changes in geese or duck populations are projected under any alternative

Source: SLM, 1980.

APPENDIX 3.15: METHODOLOGY FOR SOCIAL ASSESSMENT

The values and attitudes of 72 residents of the intensive study area were surveyed for BLM by Abt Associates during January 1980. Personal interviews were conducted with a cross section of the population; some people were chosen because of their active role in local affairs. The types of people interviewed included: ranchers, recreationists, business people, citizens, elected officials, Indians, media people, bankers, conservationists/environmentalists and government civil servants. Many of the respondents were associated with more than one of these interests.

Because of Office of Management and Budget restrictions, the interviews resembled guided conversations rather than a structured survey. The interviewer had several topics in mind covering both natural resource and social issues but the content of the discussions varied. Natural resource issues included existing range condition and trend, impact of range condition on uses such as livestock grazing and hunting, and suggestions for how a balance among competing uses could be obtained. Social issues included the local level of social well-being, values and beliefs about the local lifestyle, and perceptions of BLM. The results of this survey were published in a paper entitled An Analysis of Attitudes Regarding Vegetation Allocation and Quality of Life in the Prairie Potholes Area of Montana.

Additional information regarding attitudes relevant to this EIS was obtained via a brochure that was sent to over 1,700 people or groups including all BLM permittees in the EIS area, a random sample of EIS area residents, special interest groups, state and Federal agencies, elected officials and selected academicians. The brochure contained a description of the initial alternatives and asked people/groups to identify issues that they felt should be addressed in the EIS. At the same time, an intensive media campaign (including radio, television and newspaper) solicited the same type of information. Over 210 letters containing a variety of types of responses were received and analyzed. In the majority of the responses the writer aligned himself with an alternative or interest such as protection of livestock grazing rights or wildlife habitat.

These two studies were the major sources of information used to develop the social sections of Chapters 3 and 4 for this EIS. However, caution must be used in interpreting this information to represent the entire range of attitudes in the EIS area or in saying the percentage of respondents with a given belief can be generalized to a proportion of the entire population. In the first study respondents were not randomly selected, nor were they given a specific set of questions. In the second set of information, response rate was very low (4 percent for the random sample and 12 percent overall) and again, a specific set of questions was not utilized.

APPENDIX 3.16: METHODOLOGY FOR ASSESSING REGIONAL ECONOMIC IMPACTS

The analysis of the impacts of the alternatives on intensive study area output, earnings and employment is based on the Water Resource Council Regional Industrial Multiplier System (RIMS). The system was developed by the Regional Economic Analysis Division, Bureau of Economic Analysis (BEA), U. S. Department of Commerce. A complete explanation of the methodology and procedures for RIMS is provided in Water Resource Council Guide 5: Regional Multipliers. Also, an example of the application of RIMS to river basin planning is available in Regional Industrial Multiplier System - A Guide for River Basin Analysis, USDA Forest Service.

This section briefly explains RIMS and shows how it is applied in the regional impact analysis. RIMS is essentially a technique for estimating regional output multipliers which can be used to measure the impact of EIS alternatives on output. Changes in income and employment can be estimated from this output base.

RIMS is based on an input-output (I-O) model. The I-O model is composed of three parts; a processing sector, a final demand sector and a payments sector. The processing sector is divided into industries and displayed as a matrix; each industry is represented by a column showing purchases of that industry and a row showing its sales to others. Each element in the matrix shows the sales of the producing (row) industry to the purchasing (column) industry.

To the processing sector are added several rows for the payments sector (which includes imports, payments to governments, depreciation and payments to households) and several columns for the final demand sector (which includes government purchases, exports from the region and purchases of goods and services by households). It is important to remember that the final demand sector is the only autonomous sector in the economy and any change in production in the processing sector is a response to a change in demand.

The input-output table is constructed, in this case, for the BEA Economic Area - 094 - Great Falls, Montana. This area includes all the counties in the intensive study area plus four additional counties. Since the BEA Area represents a larger geographic area than the intensive study area, the RIMS multipliers tend to overestimate impact.

The industry - specific multipliers are calculated by first assuming that the regional economy is similar, but not identical to the national economy. The regional I-O table is constructed by "regionalizing" the national I-O table. The results of this procedure give the following gross output multipliers and components for the BEA Economic Area - 094 (Table 1). Only the industrial sectors whose final demand will change under the various EIS alternatives are listed.

TABLE 1: BEA ECONOMIC AREA - 094 - GREAT FALLS, MONTANA

Industrial Sector	WRC Sector No.	Direct Effect Component	Indirect Effect Component	Gross Output Multiplier
Meat, Animals	03	.812	.553	2.345
Construction	18	.458	.296	1.754
Trade	54	.639	.416	2.055
Services	56	.648	.432	2.071

Based on these gross output multipliers, the impact on the intensive study area output, earnings and employment for each of the alternatives can be calculated. In this analysis the ranching, construction and recreation (represented by the service and trade sectors) industries are being examined. (Increases in intensive study area earnings and employment due to increases in Federal government employment are calculated directly from estimates of the number of new employees that will be needed in each alternative.) The first step in the analysis is to estimate increases/decreases in final demand. With respect to the ranching industry, this is accomplished by calculating the changes in gross livestock sales due to changes in BLM AUMs (see Appendix 3.13). Appendix 3.14 describes the methodology utilized to determine changes in recreation expenditures. Appendix ___ shows the changes in final demand relating to range development construction and maintenance expenditures.

The change in final demand is multiplied by the appropriate gross output multiplier to determine the impact on gross output for the region. The gross output is then multiplied by the gross output to earnings factor to determine changes in earnings to the region. Earnings are then multiplied by the employment/earnings ratio for the region to determine the impact on employment.

The application of this process is shown in the following example which traces the increase in recreation expenditures through to increases in earnings and employment for Alternative A (i.e. a backward linkage effect).

The annual increase in recreational expenditures, \$136,284 is divided to \$115,841 and \$20,443 for the trade and services, respectively. The 85%/15% apportionment is based on studies conducted by Colorado State University, Economics Department (J. R. McKean, 1979). The trade sector expenditures cannot be used directly for final demand because the multiplier is based only on the marketing margin excluding the cost of the goods themselves. Thus the \$115,841 must be multiplied by .21 which results in a final demand of \$24,327. The methodology for translating the change in final demand into changes in earnings and employment follows.

APPENDIX 3.16: CONTINUED

ΔTGO = change in total gross output of all industries due to change in demand or exported output of industry j (Trade)

ΔTE = change in total earnings in the region due to change in demand for exported output of industry j (Trade)

ΔD_{xj} = change in demand for exported output of industry j (Trade)

M_j = gross output multiplier for industry j (Trade)

e_j = factor for converting a change in gross output to a change in earnings

a_{hj} = household coefficient for industry j, representing sales of households (labor) to industry j (Trade)

$E.$ = national earnings/gross output ratio
= .3008

Given: $\Delta D_{xj} = \$24,327$ From Table I: $M_j = 2.055$

$E. = .3008$ From National I-O Model: $a_{hj} = .513$

Change in total gross output: $\Delta TGO = \Delta D_{xj}(M_j)$
= $\$24,327 (2.055)$
= $\$49,991$

Change in Earnings: Step 1 - $e_j = (1/M_j)(a_{hj}) + (1-1/M_j)(E.)$
= $(1/2.055)(.513) + (1-1/2.055)(.3008)$
= $.250 + .154$
= $.404$

Step 2 - $\Delta TE = \Delta TGO(e_j)$
= $\$49,991 (.404)$
= $\$20,196$

Change in Total Employment:

f = regional employment/earnings ratio

ΔTM = change in total employment in the region due to change in demand for the exported output of industry j

Step 1 - $f = \frac{\text{total employment in the region}}{\text{total earnings in the region}}$
= $19,520/200,013,000$
= $.0000976$

Step 2 - $\Delta TM = \Delta TE(f)$
= $20,196 (.0000976)$
= 1.97

APPENDIX 4.1: ALLOTMENTS WHICH CONTAIN IMPORTANT WILDLIFE HABITAT

BIG GAME

ALLOTMENTS

Deer	4012, 4015, 4020, 4021, 4023-4025, 4030, 4034, 4047, 4052-4055, 4059, 4071, 4092, 4100, 4109, 4110, 4301, 4303, 4307, 4503, 4526, 4530, 4546, 4548-4550, 4713, 4715, 4718-4720, 4722-4726, 0475, 0479, 0482, 0525, 0538, 0557, 0565, 0566.
	5023-5027, 5030, 5050, 5051, 5053, 5071, 5073-5076, 5080, 5091, 5093-5097, 5104, 5106-5112, 5114, 5115, 5118-5120, 5123-5126, 5128, 5130, 5133, 5135, 5136, 5152-5157, 5300, 5301, 5303, 5316, 5319, 5320, 5324, 5325, 5339, 5342-5347, 5351,
	6001, 6003-6007, 6009-6014, 6016-6018, 6020, 6022, 6028, 6029, 6031, 6035, 6036, 6038-6040, 6042-6044, 6046, 6048, 6050, 6051, 6053, 6055, 6057, 6062-6067, 6070, 6072, 6073, 6075-6078, 6081, 6083, 6086, 6087, 6090, 6095, 6099, 6101, 6103, 6105, 6107, 6108, 6110, 6111, 6114-6117, 6119, 6122-6125, 6128-6134, 6136, 6137, 6161, 6178, 6183, 6217, 6226, 6229, 6231-6237, 6239, 6240, 6242, 6248, 6250, 6251, 6303, 6339, 6340, 6349, 6353-6356, 6358, 6364, 6367, 6368, 6378-6381, 6383-6399, 6401-6422, 6424-6428, 6454, 6456, 6458, 6461-6463, 6468, 6469, 6475-6479, 6481, 6484, 6485, 6489, 6490-6493, 6495, 6502, 6512, 6513, 6522, 6531-6533, 6541, 6543-6545, 6554, 6556, 6557, 6572, 6574-6576, 6589
Antelope	4010-4012, 4023, 4041, 4053, 4054, 4069-4071, 4083, 4084, 4092, 4093, 4099-4111, 4116-4118, 4121, 4125, 4126, 4200-4202, 4301, 4303, 4304, 4307, 4309, 4311, 4312, 4708-4711, 4714-4718, 4722, 4724-4728,
	5030, 5050, 5051, 5073, 5075, 5077, 5089, 5094, 5096, 5108-5112, 5114-5116, 5130-5134, 5132-5156, 5300, 5301, 5303, 5307, 5324-5326,
	6062, 6081, 6083, 6086, 6090, 6095, 6111, 6114, 6116, 6124, 6239, 6378, 6379, 6381, 6392-6397, 6468, 6469, 6492, 6545, 6567,
Elk	6388-6391, 6394-6397, 6545, 6572, 6574-6576

UPLAND GAME

ALLOTMENTS

Sharp-tailed Grouse	4000, 4002, 4005, 4008, 4010, 4012, 4014-4020, 4022-4027, 4030, 4032, 4036, 4037, 4041, 4042, 4047, 4049, 4053-4056, 4059, 4062, 4063, 4067, 4068, 4070, 4071, 4073, 4076, 4079, 4089, 4090, 4092, 4096, 4106, 4109, 4112, 4113, 4116, 4126, 4201, 4301-4304, 4308, 4309, 4312, 4503, 4505, 4512-4514, 4516-4519, 4524-4527, 4530, 4533, 4534, 4536, 4546, 4548, 4550, 4553, 4563, 4564, 4572, 4637, 4700, 4707, 4708, 4710-4713, 4715-4718, 4722-4728,
	5012, 5023-5027, 5037, 5039, 5040, 5047, 5051, 5055-5057, 5061, 5062, 5065, 5066, 5070, 5071, 5073, 5075-5077, 5088, 5087-5091, 5094-5097, 5104, 5106-5122, 5115, 5116, 5119, 5122, 5127, 5130-5133, 5139, 5144, 5149, 5150, 5152-5155, 5157, 5158, 5300, 5307, 5315, 5319, 5315, 5328, 5330, 5332, 5337, 5342-5345, 5351, 5352, 5354-5357, 5362-5364, 5366, 5369, 5370, 5372, 5386, 5400-5402, 5405, 5406, 5408, 5411, 5414, 5416-5418, 5422, 5424, 5429, 5436, 5437, 5443, 5461
	6012, 6039-6041, 6057, 6062, 6099, 6107, 6116, 6119, 6120, 6129, 6131, 6132, 6136, 6235
Sage Grouse	4024, 4116, 4304, 4309, 4521, 4535, 4546, 4550, 4553-4555, 4557, 4563, 4572, 4702, 4707, 4708, 4711, 4718, 4722, 5112, 5130, 5133, 5153, 5315, 5325, 5357, 5399, 5402, 5408, 5410, 5413, 5414, 5417, 5427, 5429, 5439, 5460
	6008, 6048, 6057, 6058, 6072, 6083, 6131, 6132, 6239
Waterfowl	All Allotments
Prairie Dog Towns	4019, 4301, 4563
	5112, 5308, 5309, 5328, 5333, 5357, 5376, 5377, 5387, 5398
	6302, 6349, 6378
Fisheries	4059, 4301, 4310, 4525, 4551, 4553, 4560, 4563, 4713, 4726
	5012, 5017, 5038, 5072, 5150, 5406, 5423, 5427
	6006, 6071, 6086, 6111, 6230, 6236, 6239
High Value Stream-side Riparian	4009, 4010, 4012, 4042, 4071, 4083, 4098, 4100, 4301, 4303, 4519, 4530, 4548, 4571, 4572, 4700, 4702-4704, 4708-4711, 4714-4716, 4719, 4723, 4724, 4726, 4727
	5010, 5012, 5036-5039, 5062, 5064, 5094, 5096, 5097, 5104, 5107, 5109, 5353-5355, 5402, 5405, 5408, 5409, 5414, 5460
	6001, 6003-6007, 6010-6012, 6016-6018, 6020, 6022, 6029, 6031, 6040, 6050, 6051, 6053, 6062, 6064, 6065, 6095, 6114, 6116, 6124, 6233, 6236, 6239, 6248, 6251, 6255, 6364, 6367-6369, 6378, 6380, 6384, 6396, 6398, 6399, 6401, 6437, 6439-6441, 6444, 6445, 6447, 6487, 6495

Advisory
Council On
Historic
Preservation

APPENDIX 4.2: PROGRAMMATIC MEMORANDUM OF AGREEMENT

1522 K Street NW.
Washington D.C.
20005

PROGRAMMATIC MEMORANDUM OF AGREEMENT
BETWEEN THE
DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT,
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AND THE
NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS
REGARDING THE
LIVESTOCK GRAZING AND RANGE IMPROVEMENT PROGRAM

WHEREAS, the Department of the Interior, Bureau of Land Management, administers public lands, principally in the 11 Western States and Alaska, under concepts of multiple-use and sustained yield, and, among other responsibilities, the Bureau of Land Management is charged with management of rangeland and forage products under the Taylor Grazing Act of 1934 (43 U.S.C. 315) and the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701), which also charges the Bureau of Land Management with the management and protection of cultural resources; and

WHEREAS, Section 106 of the National Historic Preservation Act (16 U.S.C. 470f, as amended, 90 Stat. 1320) requires that the head of any Federal agency having direct or indirect jurisdiction over a proposed Federal, federally assisted, or federally licensed undertaking affecting properties on or eligible for the National Register of Historic Places shall afford the Advisory Council on Historic Preservation (hereafter Council) a reasonable opportunity for comment; and

WHEREAS, livestock grazing and range improvement activities undertaken by the Bureau of Land Management may have an effect upon properties in or eligible for the National Register of Historic Places and will require compliance with Section 106 of the National Historic Preservation Act, Section 2 of Executive Order 11593, May 13, 1971, "Protection and Enhancement of the Cultural Environment," and the Council's regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800); and

WHEREAS, the Bureau of Land Management is currently engaged in an ongoing program of rangeland management which involves the preparation, by 1988, of approximately 145 environmental statements on specific areas where grazing is permitted on approximately

Programmatic Memorandum of Agreement
Livestock Grazing & Range Improvement Program
Bureau of Land Management
Page 2

174 million acres of public lands in the Western States and has requested Council review of the rangeland management program; and

WHEREAS, the Council and the Bureau of Land Management have met and reviewed the livestock grazing and range improvement program of the Bureau of Land Management and its relation to compliance with Section 106 of the National Historic Preservation Act of 1966 and Executive Order 11593, as implemented by the Council's regulations (36 CFR Part 800) and the responsibilities for historic and cultural resources under the National Environmental Policy Act of 1969 (42 U.S.C. 4321) as implemented by the Council on Environmental Quality in the "National Environmental Policy Act Regulations" (40 CFR Parts 1500-1508).

NOW, THEREFORE, it is mutually agreed that the Bureau of Land Management will ensure, through the stipulations outlined in this Programmatic Memorandum of Agreement, that historic and cultural properties will be given adequate consideration in grazing management program decisions and implementation which includes, but is not limited to, the preparation of grazing environmental statements, thereby meeting its responsibilities under Section 106 of the National Historic Preservation Act.

STIPULATIONS

1. The Bureau of Land Management will conduct Class I (existing data inventory) and Class II (sampling field inventory) inventories of historic and cultural properties, as specified in BLM Manual Section 8111, to be completed at the appropriate planning stage and prior to the preparation of the draft environmental statement. Inventory results will be evaluated, in consultation with the appropriate State Historic Preservation Officer, to identify properties included in or eligible for inclusion in the National Register of Historic Places.
 - a. The inventory requirement may be modified on a case by case basis for interim grazing environmental statements (i.e., those prepared during fiscal years 1979 through 1981) if an alternative is acceptable to the appropriate State Historic Preservation Officer.

Programmatic Memorandum of Agreement
Livestock Grazing & Range Improvement Program
Bureau of Land Management
Page 3

- b. If an acceptable alternative cannot be negotiated with the appropriate State Historic Preservation Officer, then the Bureau of Land Management will proceed with the preparation of the environmental statement and request the comments of the Council in accordance with 36 CFR 800. The Council's comments will be included in the final environmental statement.
2. This Programmatic Memorandum of Agreement and the inventory reports identifying historic and cultural properties will be referenced in each environmental statement.
3. Prior to commencement of any range improvement activities which involve land disturbance, the Bureau of Land Management will conduct a Class III inventory, as specified in the BLM Manual Section 811.4, supplementing previous surveys to locate, identify, and evaluate properties in the impact area that may be eligible for inclusion in the National Register of Historic Places. Range improvement activities which involve land disturbance include, but are not limited to, such activities as construction of fencing and corrals, water development, chaining, and controlled burning. If properties that may be eligible for the National Register are found, the Bureau of Land Management will consult with the appropriate State Historic Preservation Officer and forward the documentation to the Keeper of the National Register to obtain a determination of eligibility in accordance with 36 CFR Part 63.
4. The Bureau of Land Management will provide the appropriate State Historic Preservation Officer with copies of the reports of the Class I, II, and III inventories in accordance with Sections 102(a)(2) and 202(c)(9) of the Federal Land Policy and Management Act of 1976 for inclusion as part of the State inventory conducted pursuant to 36 CFR Part 61.
5. The Bureau of Land Management will design the livestock grazing and range improvement program to avoid adverse effects on properties included in or eligible for inclusion in the National Register of Historic Places, unless this is not prudent or feasible.

Programmatic Memorandum of Agreement
Livestock Grazing & Range Improvement Program
Bureau of Land Management
Page 4

6. Where it is not prudent or feasible to avoid adverse effects on properties included in or eligible for inclusion in the National Register of Historic Places as part of a livestock grazing and range improvement program authorization and the property is not a National Historic Landmark or National Historic Site, the Bureau of Land Management will consult with the appropriate State Historic Preservation Officer and will:
 - a. Develop mutually acceptable measures to mitigate the impact of the proposed action; and
 - b. Notify the Council in writing of agreements reached with the State Historic Preservation Officer under the provisions of 6(a) above. The Council need not be afforded further opportunity for review and comment.
7. The provisions of this Programmatic Memorandum of Agreement shall apply to the States of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.
8. If it is determined that the affected property is a National Historic Landmark or National Historic Site, or agreement cannot be reached between the Bureau of Land Management and the appropriate State Historic Preservation Officer on satisfactory mitigation measures, the Bureau of Land Management will request the comments of the Council in accordance with 36 CFR Part 800.
9. At the request of the President or a Member of Congress, the Council may advise the Bureau of Land Management, that a particular action, authorized by a grazing permit or lease, will require individual review and comment pursuant to 36 CFR Part 800. In that event, the Bureau of Land Management will comply with the provisions of the Council's regulations.
10. The Council and the Bureau of Land Management will review the provisions of this Agreement on an annual basis to determine whether modification or termination is appropriate. Should the current livestock grazing program of the Bureau of Land Management be revised, the ratifying parties will mutually determine whether the provisions of the Agreement will continue to apply.

Programmatic Memorandum of Agreement
Livestock Grazing & Range Improvement Program
Bureau of Land Management
Page 5

Robert H. Utter 8/20/79
Deputy Executive Director (date)
Advisory Council on Historic
Preservation

Associate Ed Hanky 12/31/77
Director, Bureau of Land Management (date)

Sam E. Orr 8/26/79
President, National Conference of (date)
State Historic Preservation Officers

Robert H. Smith 1/14/80
Chairman (date)
Advisory Council on Historic
Preservation

APPENDIX 4.3: CONSUMPTIVE USE OF WATER BY LIVESTOCK

Consumptive water use by livestock was calculated by assuming that livestock consumed ten gallons of water per day. For a 30 day period usage would be 300 gallons per animal unit. Since 30 days equal 1 month, water consumption is 300 gallons per AUM. In each alternative, water consumption is derived by multiplying total livestock AUMs by 300 which gives water consumption for 1 month.

Water consumption for 1 year is obtained by multiplying monthly use by 12. All water consumption is referred to in acre-feet/year. This conversion is made by dividing monthly or yearly use by 326,000 gallons/acre-foot.

For example: Alternative A = 319,065 AUMs.

Step 1. 1 animal unit x 30 days x 10 gallons/day = 300 gallons/AUM

Step 2. 319,065 AUMs x 300 gallons/AUM = 95,719,500 gallons/month.

Step 3. 95,719,500 gallons/month divided by 326,000 gallons/acre-foot = 294 acre-feet/month.

Step 4. 294 acre-feet/month x 12 months = 3,523 acre-feet/year.

APPENDIX 4.4: CALCULATIONS OF LIVESTOCK PRODUCTION BY ALTERNATIVE

Calculations were based on pounds of live weight produced by yearlings grazing for six months. Rex Kartchner (personnel communication 1981) estimated the average daily gain of yearlings grazing spring-fall to be 1.75 pounds. The daily gain would be much higher (2-3 pounds/day) during the spring, according to Kartchner. A yearling factor of .75 was used to adjust AUMs.

Calculations are as follows: $\text{AUMs} \times .75 = \text{yearling AUMs} \times 52.5$ (monthly gain 30×1.75) = pounds of livestock production.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
District Office
Drawer 1160
Lewistown, Montana 59457

AUG 25 1980

Memorandum

To: The File

From: John J. Grensten, Wildlife Management Biologist

Subject: Projected Wildlife Populations For The Six Alternatives of
The Prairie Pothole EIS

Dick Trueblood and Bob Watts of the Montana Dept. of Fish, Wildlife and Parks, and Larry Eichhorn, John Fahlgren and John Grensten met in the Lewistown District Office to discuss the subject information.

After a discussion of each alternative within the EIS a projected population was determined as follows:

Alternative 1 "Freezing Range Program"

Short-term - existing population

Long-term - maintain existing population

Alternative 2 "No Grazing"

Short-term - 3 times the existing population
(i.e. 3 deer/sec to 9 deer/sec)Long-term - maintain 3 times the existing
population not considering the influence
of severe winters.

Alternative 3 "Enhanced Wildlife - Watershed"

Short-term - existing population

Long-term - 3 times the existing population

Alternative 4 "Enhanced Livestock"

Short-term - existing population

Long-term - 1.5 times the existing population

Alternative 5 "Enhanced Combined"

Short-term - existing population

Long-term - 2 times the existing population

Alternative 6 "Present Management"

Short-term - existing population

Long-term - 2 times the existing population
on the 94 existing and 70 proposed AMPs

We made these projections on assumptions which will be included in the assumption section of the EIS.

John J. Grensten

Present Situation for all Alternatives

There are 2,298 reservoirs located in the EIS area. This data was collected from BLM project files and verified on aerial photos. Of the 2,298 reservoirs, 1,439 are retention type, 474 are pit-retention type and 365 are pit type. Gjersing (1971) reported that the retention and pit-retention reservoirs are the most important to waterfowl production when incorporated into a rest-rotation grazing treatment.

The 93 existing AMP allotments contain 907 retention or pit-retention reservoirs. All reservoirs in the EIS area average 3 acres in size (Jack Miller, 1977, BLM, Personal Communication). Therefore, the existing 907 reservoirs contain 2,721 surface acres of water. Assuming that rest or deferment would be realized on 40 percent of the reservoirs through grazing treatments, the following calculation can be made. About 1,088 surface acres are under rest or deferment and would produce 9 ducks per surface acre (Gjersing, 1971 and Mundinger, 1976) thus, totalling 9,792. The remaining 1,633 surface acres which would be grazed would produce 1 duck per surface acre (Gjersing, 1971 and Mundinger, 1976); thus, 1,633 ducks.

The 1,026 reservoirs in the non-AMP allotment and 365 pits would all be grazed or provide less than optimum habitat. These reservoirs contain 4,173 surface acres of water and would produce 4,173 ducks.

The 93 existing AMP allotments also contain 1,149 natural potholes covering approximately 6,314 acres. The assumption is made that 50 percent of these potholes or 3,157 acres would have enough water to produce ducks. Again 40 percent of the 3,157 acres (1,263 acres) would be under rest or deferment and would produce 11,367 ducks. The remaining 60 percent (1,894 acres) would produce 1,894 ducks.

The non-AMP allotments contain 2,323 potholes covering 11,816 acres. These areas would be grazed and only half would contain water for duck production. Therefore, these potholes would produce 5,908 ducks.

In summary, the reservoirs and potholes in the AMP and non-AMP allotments have the potential of producing $1,792 + 1,633 + 4,173 + 11,367 + 1,894 + 5,908 = 34,767$ or approximately 34,800 ducks annually.

Goose nesting islands have been placed on approximately 15 percent of the retention and pit-retention reservoirs (1,933) totalling 290 islands. McCarthy (1973) reported that about 70 percent of the islands are used by a breeding pair of geese and produce an average of 4 goslings per pair. Therefore, 290 islands at 70 percent occupancy would produce 812 geese.

The natural potholes also contain some natural islands. It is estimated that 10 percent of the potholes would contain enough water to produce a brood. However, with fluctuating water levels these islands would be much more susceptible to predation as McCarthy (1973) reported for shore nesting geese. Therefore, the assumption is made that 1 gosling per brood is produced on these islands. Thus the 3,472 potholes would produce 347 geese.

The remaining reservoirs and potholes without islands also produce geese. Hoff and Gjersing are completing a study in the EIS area which shows 1.6 geese produced per square mile. Thus $1,750,000$ acres divided by 640 acres = $2,734$ square miles $\times 1.6$ geese = $4,375$ geese.

In summary, the reservoirs and potholes in the EIS area have the potential of producing $812 + 347 + 4,375 = 5,534$ or approximately 5,500 geese annually.

Alternative A

In the long term the 1,933 reservoirs covering 5,799 surface acres would all be under some grazing treatment with rest or deferment. Therefore, 40 percent (2,320 acres) would produce 9 ducks per surface acre or 20,880 ducks and 60 percent (3,479 acres) would produce 1 duck per surface acre or 3,479 ducks. The 365 pits covering 1,095 surface acres would produce 1 duck per surface acre or 1,095 ducks.

In the long term 50 percent of the 18,130 acres of potholes would contain water. They would all be under a grazing treatment with rest or deferment. Therefore, 40 percent (3,626 acres) would produce 9 ducks per surface acre or 32,634 and 60 percent (5,439 acres) would produce 1 duck per surface acre or 5,439 ducks.

The 1,000 new water sources would contain 840 retention or pit-retention reservoirs assuming that the new reservoirs would be built in the same proportions as the existing reservoirs. The 840 reservoirs covering 2,520 surface acres would all be under AMP allotments. Therefore, 40 percent (1,008 acres) would produce 9 ducks per surface acre or 9,072 and 60 percent (1,512 acres) would produce 1 duck per surface acre or 1,512 ducks. The 160 pits covering 480 surface acres would produce 1 duck per surface acre or 480 ducks.

In summary, the existing and new reservoirs and potholes would have the potential to produce $20,880 + 3,479 + 1,095 + 32,634 + 5,439 + 9,072 + 1,512 + 480 + 74,591$ or approximately 74,600 ducks annually.

The 1,000 new reservoirs would contain approximately 840 goose nesting islands. With 70 percent occupancy and 4 goslings per brood the island could produce 2,352 or 2,350 geese, annually.

Alternative B

In the long term, 1,234 reservoirs covering 3,702 surface acres would be under some grazing treatment with rest or deferment. Therefore, 40 percent (1,481 acres) would produce 9 ducks per surface acre or 13,329 ducks and 60 percent (2,221 acres) would produce 1 duck per surface acre or 2,221 ducks. The remaining reservoirs 1,064 outside AMP allotments covering 3,192 surface acres would produce 1 duck per surface acre or 3,192 ducks.

In the long term 50 percent of the 6,018 acres of potholes in AMP allotments would have rest or deferment. Therefore 40 percent (1,204 acres) would produce 9 ducks per surface acre or 10,836 ducks and 60 percent (1,805 acres) would produce 1 duck per surface acre or 1,805 ducks. Also 6,056 acres of pothole would not be under AMP thus producing 1 duck per surface acre on 6,056 ducks.

The 450 new reservoirs would contain 378 retention or pit retention reservoirs covering 1,134 surface acres under an AMP with rest or deferment. Therefore, 40 percent (454 acres) would produce 9 ducks per surface acre or 4,086 ducks and 60 percent (680 acres) would produce 1 duck per surface acre or 680 ducks. The 72 pits covering 216 surface acres would produce 1 duck per surface acre or 216 ducks.

In summary, the existing and new reservoirs and potholes would have the potential to produce $13,329 + 2,221 + 3,192 + 10,836 + 1,805 + 6,056 + 4,086 + 680 + 216 = 42,421$ or 42,400 ducks, annually.

The 450 new reservoirs would contain approximately 378 goose nesting islands. With 70 percent occupancy and 4 goslings per brood the islands could produce 1,058 or 1,060 geese, annually.

Alternative C

Goose and duck production are the same as the calculations in the long term of Alternative A.

Alternative D

The 1,933 reservoirs covering 5,799 surface acres would all produce 9 ducks per surface acre or 52,191 ducks because of the July 1 deferment and additional rest or deferment in the grazing treatments. The 365 pits covering 1,095 acres would only produce 1 duck per surface acre or 1,095 ducks.

In the long term 50 percent of the 18,130 acres would produce 9 ducks per surface acre or 81,585 ducks.

The 1,000 new water sources would contain 840 retention and pit-retention reservoirs covering 2,520 surface acres would produce 9 ducks per surface acre or 22,680 ducks. The 160 pits covering 480 acres would only produce 480 ducks.

In summary, the potholes and existing and new reservoirs would produce $52,191 + 1,095 + 81,585 + 22,680 + 480 = 158,031$ or 158,000 ducks annually.

Goose production is the same as discussed in Alternative A.

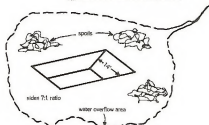
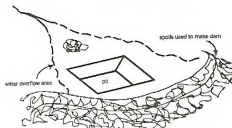
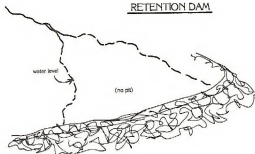
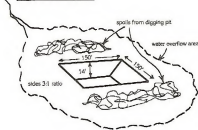
Alternative E

The duck production is the same as the calculation in Alternative D without the new reservoir production. That is $52,191 + 1,095 + 81,585 = 134,871$ or 134,900 ducks annually.

Goose production is the same as the existing with no additional goose nesting islands that is 5,500 geese.

Alternative F

The calculations of the existing situation at the beginning of this appendix is the duck and goose production in this alternative.

WATERFOWL PIT PONDPIT RETENTIONRETENTION DAMPIT RESERVOIR

APPENDIX 4.7: ESTIMATED POSITIVE LONG TERM IMPACTS OF ALTERNATIVE A
ON NET ANNUAL RANCH INCOME ON AFFECTED RANCHES

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In BLM AUMs Per Ranch	Average Percent Increase In BLM AUMs Per Ranch	Average Percent Increase In Total AUMs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average Per Ranch	Percentage Per Ranch	All Ranches
Small Livestock Small Cash Crop	0-100	60	30	48	30.0	8.0	\$ 2,846	\$ --	\$ 2,846	\$ 248	9.0	\$ 7,440
Small Livestock Medium Cash Crop	0-100	60	57	54	34.0	9.0	2,846	9,095	11,941	281	2.0	16,017
Small Livestock Large Cash Crop	0-100	60	40	74	47.0	13.0	2,846	43,020	45,866	389	1.0	15,560
Medium Livestock Small Cash Crop	101-250	170	26	119	31.0	7.0	10,662	--	10,662	778	7.0	20,228
Medium Livestock Medium Cash Crop	101-250	170	68	123	32.0	7.0	10,662	9,095	19,757	803	4.0	54,604
Medium Livestock Large Cash Crop	101-250	170	37	135	35.0	8.0	10,662	43,020	53,682	879	2.0	32,523
Large Livestock Small Cash Crop	251-499	350	24	319	32.0	9.0	24,501	--	24,501	2,042	8.0	49,008
Large Livestock Medium Cash Crop	251-499	350	38	306	31.0	9.0	24,501	9,095	33,596	1,978	6.0	75,164
Large Livestock Large Cash Crop	251-499	350	31	281	29.0	8.0	24,501	43,020	67,521	1,850	3.0	57,350
Very Large Livestock Small Cash Crop	500 or more	900	13	535	27.0	6.0	65,341	--	65,341	3,380	5.0	43,940
Very Large Livestock Medium Cash Crop	500 or more	900	12	485	25.0	6.0	65,341	9,095	74,436	3,130	4.0	37,560
Very Large Livestock Large Cash Crop	500 or more	900	19	702	36.0	8.0	65,341	43,020	108,361	4,507	4.0	85,633
TOTAL			395									\$ 495,027

Source: BLM, 1980

APPENDIX 4.8: ANNUAL ECONOMIC IMPACT OF ALTERNATIVE A ON THE INTENSIVE STUDY AREA

	Agriculture	Construction	Services ⁸	Trade ⁸	Government	Total	% of 1978 Total
Existing Situation (1978) ¹							
Earnings (\$1,000)	30,383	14,032	32,781	23,732	40,068	200,013	100
Employment	3,372 ⁷	660	3,240	2,687	4,304	19,520 ⁹	100
Short Term Changes ²							
Sales ⁴ (\$1,000)	0	1,495	0	0	-	-	-
Gross Output ⁴ (\$1,000)	0	2,622	0	0	-	-	-
Earnings ⁴ (\$1,000)	0	771	0	0	614 ¹⁰	1,385 ¹¹	0.7
Employment ⁵	0	75	0	0	32 ¹⁰	107 ¹¹	0.5
Long Term Changes ²							
Sales ⁶ (\$1,000)	2,919	73	20	116	-	-	-
Gross Output ⁶ (\$1,000)	6,845	128	42	50	-	-	-
Earnings ⁶ (\$1,000)	1,643	38	17	20	369 ¹⁰	2,087 ¹¹	1.0
Employment ⁵	160	4	2	2	18 ¹⁰	186 ¹¹	1.0

- Figures for existing situation indicate employment and earnings within the itemized sectors for 1978.
- Figures for short term and long term changes indicate direct and indirect output, earnings and employment generated by the change in sales for the itemized sector (except for government sector, see #10).
- The short term changes for employment indicate the total change from the existing situation during the first 7 years of implementation.
- The short term changes for output, earnings and employment indicate the average annual change from the existing situation during the first 7 years of implementation.
- Long term changes for employment indicate the total change from the existing situation during the 15 years of implementation following the first 7 years.
- Long term changes for output, earnings and employment indicate the average annual change from the existing situation during the 15 years of implementation following the first 7 years.
- Includes wage and salary and proprietary employment.
- Recreation expenditures are divided into the service and trade sectors.
- This is the total listed for all sectors in Tables 3.30 and 3.31.
- This is only the direct change associated with government earnings and employment
- Total for changes in agriculture, construction, services, trade and government.

Source: MLM, 1980

APPENDIX 4.9: ESTIMATED POSITIVE LONG-TERM IMPACTS OF ALTERNATIVE B
ON NET ANNUAL RANCH INCOME ON AFFECTED RANCHES

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In BLM AUMs Per Ranch	Average Percent Increase In BLM AUMs Per Ranch	Average Percent Increase In Total AUMs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average Per Ranch	Percentage Per Ranch	All Ranches
Small Livestock Small Cash Crop	0-100	60	12	60	38.0	10.0	\$ 2,846	\$ -	\$ 2,846	\$ 314	11.0	\$ 3,768
Small Livestock Medium Cash Crop	0-100	60	12	56	35.0	10.0	2,846	9,095	11,941	289	2.0	3,468
Small Livestock Large Cash Crop	0-100	60	11	139	87.0	24.0	2,846	43,020	45,866	719	2.0	7,909
Medium Livestock Small Cash Crop	101-250	170	12	102	27.0	6.0	10,662	-	10,662	678	6.0	8,136
Medium Livestock Medium Cash Crop	101-250	170	31	112	29.0	7.0	10,662	9,095	19,757	728	4.0	22,568
Medium Livestock Large Cash Crop	101-250	170	16	113	30.0	7.0	10,662	43,020	53,682	753	1.0	12,048
Large Livestock Small Cash Crop	251-499	350	15	394	40.0	12.0	24,501	-	24,501	2,552	10.0	38,280
Large Livestock Medium Cash Crop	251-499	350	21	337	34.0	10.0	24,501	9,095	33,596	2,169	6.0	45,549
Large Livestock Large Cash Crop	251-499	350	20	231	24.0	7.0	24,501	43,020	67,521	1,531	2.0	30,620
Very Large Livestock Small Cash Crop	500 or more	900	7	678	34.0	8.0	65,341	-	65,341	4,257	7.0	29,799
Very Large Livestock Medium Cash Crop	500 or more	900	8	525	27.0	6.0	65,341	9,095	74,436	3,380	5.0	27,040
Very Large Livestock Large Cash Crop	500 or more	900	14	741	38.0	8.0	65,341	43,020	108,361	4,758	4.0	66,612
TOTAL			179									\$295,797

Source: BLM, 1980

APPENDIX 4.10: ANNUAL ECONOMIC IMPACT OF ALTERNATIVE B ON THE INTENSIVE STUDY AREA

	Agriculture	Construction	Services ⁸	Trade ⁸	Government	Total	% of 1978 Total
Existing Situation (1978) ¹							
Earnings (\$1,000)	30,383	14,032	32,781	23,732	40,068	200,013	100
Employment	3,372 ⁷	660	3,240	2,687	4,304	19,520 ⁹	100
Short Term Changes ²							
Sales ⁴ (\$1,000)	0	869	0	0	-	-	-
Gross Output ⁶ (\$1,000)	0	1,525	0	0	-	-	-
Earnings ⁵ (\$1,000)	0	448	0	0	299 ¹⁰	747 ¹¹	0.4
Employment ³	0	44	0	0	16 ¹⁰	60 ¹¹	0.3
Long Term Changes ²							
Sales ⁴ (\$1,000)	1,452	35	12	69	-	-	-
Gross Output ⁶ (\$1,000)	3,405	62	25	30	-	-	-
Earnings ⁵ (\$1,000)	817	18	10	12	142 ¹⁰	999 ¹¹	0.5
Employment ³	80	2	1	1	7 ¹⁰	91 ¹¹	0.5

- Figures for existing situation indicate employment and earnings within the itemized sectors for 1978.
- Figures for short term and long term changes indicate direct and indirect output, earnings and employment generated by the change in sales for the itemized sector (except for government sector, see #10).
- The short term changes for employment indicate the total change from the existing situation during the first 7 years of implementation.
- The short term changes for output, earnings and employment indicate the average annual change from existing situation during the first 7 years of implementation.
- Long term changes for employment indicate the total change from the existing situation during the 15 years of implementation following the first 7 years.
- Long term changes for output, earnings and employment indicate the average annual change from the current situation during the 15 years of implementation following the first 7 years.
- Includes wage and salary and proprietary employment.
- Recreation expenditures are divided into the service and trade sectors.
- This is the total listed for all sectors in Tables 3.30 and 3.31.
- This is only the direct change associated with government earnings and employment.
- Total for changes in agriculture, construction, services, trade and government.

Source: ELM, 1980

APPENDIX 4.11: ESTIMATED POSITIVE SHORT TERM IMPACTS OF ALTERNATIVE C
ON NET ANNUAL RANCH INCOME ON AFFECTED RANCHES*

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In BLM AUMs Per Ranch	Average Percent Increase In BLM AUMs Per Ranch	Average Percent Increase In Total AUMs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average	Percentage	All
										Per Ranch	Per Ranch	Ranches
Small Livestock Small Cash Crop	0-100	60	22	87	55.0	15.0	\$ 2,846	\$ -	\$ 2,846	\$ 457	16.0	\$ 10,054
Small Livestock Medium Cash Crop	0-100	60	44	56	35.0	10.0	2,846	9,095	11,941	291	2.0	12,804
Small Livestock Large Cash Crop	0-100	60	23	66	42.0	11.0	2,846	43,020	45,866	349	1.0	8,027
Medium Livestock Small Cash Crop	101-250	170	18	119	31.0	7.0	10,662	-	10,662	778	7.0	14,004
Medium Livestock Medium Cash Crop	101-250	170	50	139	36.0	8.0	10,662	9,095	19,757	904	5.0	45,200
Medium Livestock Large Cash Crop	101-250	170	26	169	44.0	10.0	10,662	43,020	53,682	1,104	2.0	28,704
Large Livestock Small Cash Crop	251-499	350	17	363	37.0	11.0	24,501	-	24,501	2,361	10.0	40,137
Large Livestock Medium Cash Crop	251-499	350	31	262	27.0	8.0	24,501	9,095	33,596	1,723	5.0	53,413
Large Livestock Large Cash Crop	251-499	350	26	276	28.0	8.0	24,501	43,020	67,521	1,786	3.0	46,436
Very Large Livestock Small Cash Crop	500 or more	900	9	751	38.0	9.0	65,341	-	65,341	4,758	7.0	42,822
Very Large Livestock Medium Cash Crop	500 or more	900	9	615	31.0	7.0	65,341	9,095	74,436	3,881	5.0	34,929
Very Large Livestock Large Cash Crop	500 or more	900	18	546	28.0	6.0	65,341	43,020	108,361	3,506	3.0	63,108
			TOTAL	293								\$ 399,638

* Includes operations with existing and proposed AMPs only and with a combination of AMP and non-AMP allotments

Source: BLM, 1980

APPENDIX 4.12: ESTIMATED NEGATIVE SHORT TERM IMPACT OF ALTERNATIVE C
ON NET ANNUAL RANCH INCOME ON AFFECTED RANCHES*

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In BLM AUMs Per Ranch	Average Percent Increase In BLM AUMs Per Ranch	Average Percent Increase In Total AUMs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average Per Ranch	Percentage Per Ranch	All Ranches
Small Livestock Small Cash Crop	0-100	60	8	25	16.0	4.0	\$ 2,846	\$ -	\$ 2,846	\$ 277	10.0	\$ 2,216
Small Livestock Medium Cash Crop	0-100	60	11	22	14.0	4.0	2,846	9,095	11,941	243	2.0	2,673
Small Livestock Large Cash Crop	0-100	60	15	64	40.0	11.0	2,846	43,020	45,866	896	2.0	13,440
Medium Livestock Small Cash Crop	101-250	170	6	118	31.0	7.0	10,662	-	10,662	1,712	16.0	10,272
Medium Livestock Medium Cash Crop	101-250	170	18	100	26.0	6.0	10,662	9,095	19,757	1,342	7.0	24,156
Medium Livestock Large Cash Crop	101-250	170	11	131	34.0	8.0	10,662	43,020	53,682	1,986	4.0	21,846
Large Livestock Small Cash Crop	251-499	350	6	100	10.0	3.0	24,501	-	24,501	1,128	5.0	6,768
Large Livestock Medium Cash Crop	251-499	350	8	133	14.0	4.0	24,501	9,095	33,596	1,619	5.0	12,952
Large Livestock Large Cash Crop	251-499	350	5	79	8.0	2.0	24,501	43,020	67,521	838	1.0	4,190
Very Large Livestock Small Cash Crop	500 or more	900	3	499	29.0	6.0	65,341	-	65,341	6,742	10.0	20,226
Very Large Livestock Medium Cash Crop	500 or more	900	3	290	15.0	3.0	65,341	9,095	74,436	4,084	5.0	12,252
Very Large Livestock Large Cash Crop	500 or more	900	1	692	35.0	8.0	65,341	43,020	108,361	10,828	10.0	10,828
TOTAL			95									\$ 141,819

* Includes operations with existing and proposed AMPs only and with a combination of AMP and non-AMP allotments

Source: BLM, 1980

APPENDIX 4.13: ESTIMATED POSITIVE LONG TERM IMPACTS OF ALTERNATIVE C
ON NET ANNUAL RANCH INCOME ON AFFECTED RANCHES*

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In SLM AUMs Per Ranch	Average Percent Increase In SLM AUMs Per Ranch	Average Percent Increase In Total AUMs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average Per Ranch	Percentage Per Ranch	All Ranches
Small Livestock Small Cash Crop	0-100	60	31	206	130.0	35.0	\$ 2,846	\$ -	\$ 2,846	\$ 1,079	38.0	\$ 33,449
Small Livestock Medium Cash Crop	0-100	60	57	213	134.0	36.0	2,846	9,095	11,941	1,112	9.0	63,384
Small Livestock Large Cash Crop	0-100	60	36	218	137.0	37.0	2,846	43,020	45,866	1,137	2.0	40,932
Medium Livestock Small Cash Crop	101-250	170	25	544	142.0	33.0	10,662	-	10,662	3,564	33.0	89,100
Medium Livestock Medium Cash Crop	101-250	170	64	540	141.0	33.0	10,662	9,095	19,757	3,539	18.0	226,496
Medium Livestock Large Cash Crop	101-250	170	33	574	150.0	35.0	10,662	43,020	53,682	3,765	7.0	124,245
Large Livestock Small Cash Crop	251-499	350	23	1,267	129.0	37.0	24,501	-	24,501	8,230	34.0	189,290
Large Livestock Medium Cash Crop	251-499	350	38	1,196	122.0	35.0	24,501	9,095	33,596	7,784	23.0	295,792
Large Livestock Large Cash Crop	251-499	350	31	1,181	120.0	35.0	24,501	43,020	67,521	7,656	11.0	237,336
Very Large Livestock Small Cash Crop	500 or more	900	11	2,289	116.0	26.0	65,341	-	65,341	14,523	22.0	159,753
Very Large Livestock Medium Cash Crop	500 or more	900	11	2,383	121.0	27.0	65,341	9,095	74,436	15,149	20.0	166,639
Very Large Livestock Large Cash Crop	500 or more	900	19	2,877	146.0	33.0	65,341	43,020	108,361	18,279	17.0	347,301

TOTAL

379

\$1,973,717

* Includes operations with existing and proposed AMPs only and with a combination of AMP and non-AMP allotments.

Source: BLM, 1980

APPENDIX 4.14: ESTIMATED NEGATIVE LONG TERM IMPACTS OF ALTERNATIVE C
ON NET ANNUAL RANCH INCOME ON AFFECTED RANCHES*

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In BLM AUMs Per Ranch	Average Percent Increase In BLM AUMs Per Ranch	Average Percent Increase In Total AUMs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average Per Ranch	Percentage Per Ranch	All Ranches
Small Livestock Small Cash Crop	0-100	60	0	-	-	-	\$ 2,846	\$ -	\$ 2,846	\$ -	-	\$ -
Small Livestock Medium Cash Crop	0-100	60	0	-	-	-	2,846	9,095	11,941	-	-	-
Small Livestock Large Cash Crop	0-100	60	4	55	35.0	9.0	2,846	43,020	45,866	756	2.0	3,024
Medium Livestock Small Cash Crop	101-250	170	1	170	45.0	10.0	10,662	-	10,662	2,818	26.0	2,818
Medium Livestock Medium Cash Crop	101-250	170	4	124	32.0	7.0	10,662	9,095	19,757	1,803	9.0	7,212
Medium Livestock Large Cash Crop	101-250	170	4	105	27.0	6.0	10,662	43,020	53,682	1,411	3.0	5,644
Large Livestock Small Cash Crop	251-499	350	1	63	6.0	2.0	24,501	-	24,501	547	2.0	547
Large Livestock Medium Cash Crop	251-499	350	1	72	7.0	2.0	24,501	9,095	33,596	692	2.0	692
Large Livestock Large Cash Crop	251-499	350	0	-	-	-	24,501	43,020	67,521	-	-	-
Very Large Livestock Small Cash Crop	500 or more	900	1	740	38.0	8.0	65,341	-	65,341	12,087	19.0	12,087
Very Large Livestock Medium Cash Crop	500 or more	900	1	406	21.0	5.0	65,341	9,095	74,436	5,676	8.0	5,676
Very Large Livestock Large Cash Crop	500 or more	900	0	-	-	-	65,341	43,020	108,361	-	-	-

TOTAL

17

* Includes operations with existing and proposed AMPs only and with a
combination of AMP and non-AMP allotments

\$37,700

Source: BLM, 1980

APPENDIX 4.15: ANNUAL ECONOMIC IMPACT OF ALTERNATIVE C ON THE INTENSIVE STUDY AREA

	Agriculture	Construction	Services ⁸	Trade ⁸	Government	Total	% of 1978 Total
Existing Situation (1978) ¹							
Earnings (\$1,000)	30,383	14,032	32,781	23,732	40,068	200,013	100
Employment	3,372 ⁷	660	3,240	2,687	4,304	19,520 ⁹	100
Short Term Changes ²							
Sales ⁴ (\$1,000)	1,890	3,134	0	0	-	-	-
Gross Output ⁴ (\$1,000)	4,432	5,497	0	0	-	-	-
Earnings ⁴ (\$1,000)	1,064	1,616	0	0	1,016 ¹⁰	3,696 ¹¹	1.8
Employment ³	104	158	0	0	55 ¹⁰	317 ¹¹	1.6
Long Term Changes ²							
Sales ⁶ (\$1,000)	11,489	61	11	60	-	-	-
Gross Output ⁶ (\$1,000)	26,942	106	22	26	-	-	-
Earnings ⁶ (\$1,000)	6,466	31	9	11	369 ¹⁰	6,886 ¹¹	3.4
Employment ⁵	631	3	1	1	18 ¹⁰	654 ¹¹	3.3

- Figures for existing situation indicate employment and earnings within the itemized sectors for 1978.
- Figures for short term and long term changes indicate direct and indirect output, earnings and employment generated by the change in sales for the itemized sector (except for government sector, see #10).
- The short term changes for employment indicate the total change from existing situation during the first 7 years of implementation.
- The short term changes for output, earnings and employment indicate the average annual change from the existing situation during the first 7 years of implementation.
- Long term changes for employment indicate the total change from the existing situation during the 15 years of implementation following the first 7 years.
- Long term changes for output, earnings and employment indicate the average annual change from the existing situation during the 15 years of implementation following the first 7 years.
- Includes wage and salary and proprietary employment.
- Recreation expenditures are divided into the service and trade sectors.
- This is the total listed for all sectors in Tables 3.30 and 3.31.
- This is only the direct change associated with government earnings and employment.
- Total for changes in agriculture, construction, services, trade and government.

Source: BLM, 1980

APPENDIX 4.16: ESTIMATED NEGATIVE SHORT TERM IMPACTS OF ALTERNATIVE D
ON NET ANNUAL RANCH INCOME ON AFFECTED RANCHES

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In BLM AUMs Per Ranch	Average Percent Increase In BLM AUMs Per Ranch	Average Percent Increase In Total AUMs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average Per Ranch	Percentage Per Ranch	All Ranches
Small Livestock Small Cash Crop	0-100	60	32	66	42.0	11.0	\$ 2,846	\$ -	\$ 2,846	\$ 950	33.0	\$ 30,400
Small Livestock Medium Cash Crop	0-100	60	56	59	37.0	10.0	2,846	9,095	11,941	812	7.0	45,472
Small Livestock Large Cash Crop	0-100	60	43	67	42.0	11.0	2,846	43,020	45,866	950	2.0	40,850
Medium Livestock Small Cash Crop	101-250	170	26	159	42.0	10.0	10,662	-	10,662	2,592	24.0	67,392
Medium Livestock Medium Cash Crop	101-250	170	68	161	42.0	10.0	10,662	9,095	19,757	2,592	13.0	176,256
Medium Livestock Large Cash Crop	101-250	170	39	165	43.0	10.0	10,662	43,020	53,682	2,668	5.0	104,052
Large Livestock Small Cash Crop	251-499	350	24	454	46.0	13.0	24,501	-	24,501	6,731	29.0	161,544
Large Livestock Medium Cash Crop	251-499	350	40	352	36.0	10.0	24,501	9,095	33,596	4,950	15.0	198,000
Large Livestock Large Cash Crop	251-499	350	33	269	27.0	8.0	24,501	43,020	67,521	3,388	5.0	111,804
Very Large Livestock Small Cash Crop	500 or more	900	13	446	23.0	5.0	65,341	-	65,341	6,209	10.0	80,717
Very Large Livestock Medium Cash Crop	500 or more	900	11	764	39.0	9.0	65,341	9,095	74,436	12,507	17.0	137,577
Very Large Livestock Large Cash Crop	500 or more	900	19	884	45.0	10.0	65,341	43,020	108,361	14,926	14.0	283,594
TOTAL			404									\$1,437,658

Source: BLM, 1980

APPENDIX 4.17: ESTIMATED NEGATIVE LONG TERM IMPACTS OF ALTERNATIVE D ON
NET ANNUAL RANCH INCOME ON AFFECTED RANCHES

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In BLM ADUs Per Ranch	Average Percent Increase In BLM ADUs Per Ranch	Average Percent Increase In Total ADUs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average Per Ranch	Percentage Per Ranch	All Ranches
Small Livestock Small Cash Crop	0-100	60	23	45	28.0	8.0	\$ 2,846	\$ -	\$ 2,846	\$ 561	20.0	\$ 12,903
Small Livestock Medium Cash Crop	0-100	60	37	58	36.0	10.0	2,846	9,095	11,941	784	7.0	29,008
Small Livestock Large Cash Crop	0-100	60	29	51	32.0	9.0	2,846	43,020	45,866	674	1.0	19,546
Medium Livestock Small Cash Crop	101-250	170	20	118	31.0	7.0	10,662	-	10,662	1,712	16.0	34,240
Medium Livestock Medium Cash Crop	101-250	170	54	117	31.0	7.0	10,662	9,095	19,757	1,712	9.0	92,448
Medium Livestock Large Cash Crop	101-250	170	33	140	37.0	8.0	10,662	43,020	53,682	2,224	4.0	73,392
Large Livestock Small Cash Crop	251-499	350	23	350	36.0	10.0	24,501	-	24,501	4,950	20.0	113,850
Large Livestock Medium Cash Crop	251-499	350	32	225	23.0	7.0	24,501	9,095	33,596	2,754	8.0	88,128
Large Livestock Large Cash Crop	251-499	350	29	165	17.0	5.0	24,501	43,020	67,521	1,970	3.0	57,130
Very Large Livestock Small Cash Crop	500 or more	900	13	192	10.0	2.0	65,341	-	65,341	2,701	4.0	35,113
Very Large Livestock Medium Cash Crop	500 or more	900	9	442	22.0	5.0	65,341	9,095	74,436	5,942	8.0	53,478
Very Large Livestock Large Cash Crop	500 or more	900	16	484	25.0	6.0	65,341	43,020	108,361	6,742	6.0	107,872
TOTAL												\$ 717,108

SOURCE: BLM, 1980

APPENDIX 4.18: POSITIVE LONG TERM IMPACTS OF ALTERNATIVE D ON
NET ANNUAL RANCH INCOME ON AFFECTED RANCHES

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In BLM AUMs Per Ranch	Average Percent Increase In BLM AUMs Per Ranch	Average Percent Increase In Total AUMs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average Per Ranch	Percentage Per Ranch	All Ranches
Small Livestock Small Cash Crop	0-100	60	9	43	27.0	7.0	\$ 2,846	\$ --	\$ 2,846	\$ 224	8.0	\$ 2,016
Small Livestock Medium Cash Crop	0-100	60	19	46	29.0	8.0	2,846	9,095	11,941	241	2.0	4,579
Small Livestock Large Cash Crop	0-100	60	15	41	26.0	7.0	2,846	43,020	45,866	216	0.0	3,240
Medium Livestock Small Cash Crop	101-250	170	6	62	16.0	4.0	10,662	--	10,662	402	4.0	2,412
Medium Livestock Medium Cash Crop	101-250	170	15	45	12.0	3.0	10,662	9,095	19,757	301	2.0	4,515
Medium Livestock Large Cash Crop	101-250	170	5	62	16.0	4.0	10,662	43,020	53,682	402	1.0	2,010
Large Livestock Small Cash Crop	251-499	350	1	20	2.0	1.0	24,501	--	24,501	128	1.0	128
Large Livestock Medium Cash Crop	251-499	350	8	75	8.0	2.0	24,501	9,095	33,596	510	2.0	4,080
Large Livestock Large Cash Crop	251-499	350	3	516	53.0	15.0	24,501	43,020	67,521	3,381	5.0	10,143
Very Large Livestock Small Cash Crop	500 or more	900	0	--	--	--	65,341	--	65,341	--	--	--
Very Large Livestock Medium Cash Crop	500 or more	900	2	381	19.0	4.0	65,341	9,095	74,436	2,379	3.0	4,758
Very Large Livestock Large Cash Crop	500 or more	900	3	308	16.0	4.0	65,341	43,020	108,361	2,003	2.0	6,009
TOTAL			86									\$ 43,890

Source: BLM, 1980

APPENDIX 4.19: ANNUAL ECONOMIC IMPACT OF ALTERNATIVE D ON THE INTENSIVE STUDY AREA

	Agriculture	Construction	Services ⁸	Trade ⁸	Government	Total	% of 1978 Total
Existing Situation (1978) ¹							
Earnings (\$1,000)	30,383	14,032	32,781	23,732	40,068	200,013	100
Employment	3,372 ⁷	660	3,240	2,687	4,304	19,520 ⁹	100
Short Term Changes ²							
Sales ⁴ (\$1,000)	-4,173	1,902	0	0	-	-	-
Gross Output ⁴ (\$1,000)	-9,785	3,336	0	0	-	-	-
Earnings ⁴ (\$1,000)	-2,348	981	0	0	701 ¹⁰	-666 ¹¹	0.3
Employment ³	- 229	96	0	0	37 ¹⁰	- 96 ¹¹	0.5
Long Term Changes ²							
Sales ⁶ (\$1,000)	-2,034	116	41	235	-	-	-
Gross Output ⁶ (\$1,000)	-4,770	203	86	101	-	-	-
Earnings ⁶ (\$1,000)	-1,145	60	34	41	421 ¹⁰	-588 ¹¹	0.3
Employment ⁵	- 112	6	3	4	21 ¹⁰	- 78 ¹¹	0.4

- Figures for existing situation indicate employment and earnings within the itemized sectors for 1978.
- Figures for short term and long term changes indicate direct and indirect output, earnings and employment generated by the change in sales for the itemized sector (except for government sector, see #10).
- The short term changes for employment indicate the total change from the existing situation during the first 7 years of implementation.
- The short term changes for output, earnings and employment indicate the average annual change from the existing situation during the first 7 years of implementation.
- Long term changes for employment indicate the total change from the existing situation during the 15 years of implementation following the first 7 years.
- Long term changes for output, earnings and employment indicate the average annual change from the existing situation during the 15 years of implementation following the first 7 years.
- Includes wage and salary and proprietary employment.
- Recreation expenditures are divided into the service and trade sectors.
- This is the total listed for all sectors in Tables 3.30 and 3.31.
- This is only the direct change associated with government earnings and employment.
- Total for changes in agriculture, construction, services, trade and government.

Source: BLN, 1980

APPENDIX 4.20: ESTIMATED NEGATIVE SHORT AND LONG TERM IMPACTS OF ALTERNATIVE E
ON NET ANNUAL RANCH INCOME ON AFFECTED RANCHES

	Size By Number Of Brood Cows	Average Number Of Brood Cows	Number Of Ranches	Average Increase In BLM AUMs Per Ranch	Average Percent Increase In BLM AUMs Per Ranch	Average Percent Increase In Total AUMs Per Ranch	Average Annual Net Livestock Income Per Ranch	Average Annual Net Crop Income Per Ranch	Average Annual Net Total Income Per Ranch	Increased Annual Income		
										Average Per Ranch	Percentage Per Ranch	All Ranches
Small Livestock Small Cash Crop	0-100	60	46	159	100	30.8	\$ 2,846	\$ -	\$ 2,846	\$ 5,218	183.0	\$ 240,028
Small Livestock Medium Cash Crop	0-100	60	96	159	100	30.8	2,846	9,095	11,941	5,218	44.0	500,928
Small Livestock Large Cash Crop	0-100	60	70	159	100	30.8	2,846	43,020	45,866	5,218	11.0	365,260
Medium Livestock Small Cash Crop	101-250	170	36	382	100	23.5	10,662	-	10,662	14,887	140.0	535,932
Medium Livestock Medium Cash Crop	101-250	170	88	382	100	23.5	10,662	9,095	19,757	14,887	75.0	1,310,056
Medium Livestock Large Cash Crop	101-250	170	60	382	100	23.5	10,662	43,020	53,682	14,887	28.0	893,220
Large Livestock Small Cash Crop	251-499	350	32	982	100	28.6	24,501	-	24,501	34,453	141.0	1,102,496
Large Livestock Medium Cash Crop	251-499	350	40	982	100	28.6	24,501	9,095	33,596	34,453	103.0	1,378,120
Large Livestock Large Cash Crop	251-499	350	40	982	100	28.6	24,501	43,020	67,521	34,453	51.0	1,378,120
Very Large Livestock Small Cash Crop	500 or more	900	18	1972	100	25.8	65,341	-	65,341	92,140	141.0	1,658,520
Very Large Livestock Medium Cash Crop	500 or more	900	12	1972	100	25.8	65,341	9,095	74,436	92,140	124.0	1,105,680
Very Large Livestock Large Cash Crop	500 or more	900	20	1972	100	25.8	65,341	43,020	108,361	92,140	85.0	1,842,800
TOTAL			558									\$12,311,160

Source: BLM, 1980

APPENDIX 4.21: ANNUAL ECONOMIC IMPACT OF ALTERNATIVE E ON THE INTENSIVE STUDY AREA

	Agriculture	Construction	Services ⁸	Trade ⁸	Government	Total	% of 1978 Total
Existing Situation (1978) ¹							
Earnings (\$1,000)	30,383	14,032	32,781	23,732	40,068	200,013	100
Employment	3,372 ⁷	660	3,240	2,687	4,304	19,520 ⁹	100
Short Term Changes ²							
Sales ⁴ (\$1,000)	-12,926	2,000	39	221	-	-	-
Gross Output ⁴ (\$1,000)	-30,311	3,508	81	96	-	-	-
Earnings ⁴ (\$1,000)	-7,274	1,031	32	39	656 ¹⁰	-5,516 ¹¹	2.8
Employment ³	-710	101	3	4	32 ¹⁰	-570 ¹¹	2.9
Long Term Changes ²							
Sales ⁶ (\$1,000)	-12,926	104	41	231	-	-	-
Gross Output ⁶ (\$1,000)	-30,311	182	84	100	-	-	-
Earnings ⁶ (\$1,000)	-7,274	54	33	40	604 ¹⁰	-6,543 ¹¹	3.3
Employment ⁵	-710	5	3	4	29 ¹⁰	-669 ¹¹	3.4

- Figures for existing situation indicate employment and earnings within the itemized sectors for 1978.
- Figures for short term and long term changes indicate direct and indirect output, earnings and employment generated by the change in sales for the itemized sector (except for government sector, see #10).
- The short term changes for employment indicate the total change from existing situation during the first 7 years of implementation.
- The short term changes for output, earnings and employment indicate the average annual change from the existing situation during the first 7 years of implementation.
- Long term changes for employment indicate the total change from the existing situation during the 15 years of implementation following the first 7 years.
- Long term changes for output, earnings and employment indicate the average annual change from the existing situation during the 15 years of implementation following the first 7 years.
- Includes wage and salary and proprietary employment.
- Recreation expenditures are divided into the service and trade sectors.
- This is the total listed for all sectors in Tables 3.30 and 3.31.
- This is only the direct change associated with government earnings and employment

Source: EIM, 1980



ACCELERATED EROSION. Erosion processes increased by the activities of man. See "Erosion".

ACID SOIL. Soil with a pH value less than 6.6.

ACTIVITY OCCASION. Participation in a recreational activity by one person for any part of a day.

ACTUAL USE. The true amount of grazing in AUMs based on the numbers of livestock and grazing dates submitted by the livestock operator and confirmed by periodic field checks by the BLM.

ADJUSTMENTS. Changes in animal numbers, seasons of use, kinds or class of animals or management practices as warranted by specific conditions.

ALKALINE SOIL. A soil that is alkaline throughout most or all of the parts occupied by plant roots. It is any soil horizon having a pH value greater than 7.3.

ALLOTMENT. An area of land where one or more livestock operators graze their livestock. Allotments generally consist of BLM lands but may also include state owned and private lands. An allotment may include one or more separate pastures. Livestock numbers and seasons of use are specified for each allotment.

ALLOTMENT MANAGEMENT PLAN (AMP). A written program of livestock grazing management, including supportive measures if required, designed to attain specific management goals in a grazing allotment.

ALLOWABLE USE. The amount of use the various plant species can withstand and still maintain their vigor and reproductive capabilities.

ALLUVIAL SOIL. A soil developing from recently deposited alluvium and showing essentially no development of layers or modification of the recently deposited materials.

ALLUVIUM. Soil and rock debris deposited by streams.

ANIMAL UNIT MONTH (AUM). A standardized measurement of the amount of forage necessary for the complete sustenance of one animal for one month; also, the measurement of the privilege of grazing one animal for one month.

APPRECIATION. Increase in cost, price or value over the cost, price or value from a previous time or period.

AQUATIC. Living or growing in or on the water.

AQUIFER. A rock formation, group of rock formations or part of a rock formation that contains enough water-saturated permeable material to yield water to a spring or well.

GLOSSARY

ASPECT. The orientation of a slope with respect to the compass; a position facing or fronting a particular direction; also, the visual first impression of vegetation at a particular time or as seen from a specific point.

AVAILABLE WATER CAPACITY. The portion of water in a soil that can readily be absorbed by plant roots. It is rated on soil characteristics that influence the ability of the soil to hold water such as content of organic matter, soil texture and soil structure.

AWNS. A slender bristle found at the tips of the spikelets in many grasses.



Bluebunch Wheatgrass

BEDROCK. The solid unweathered rock underlying soils.

BROWSE. To browse is to graze a plant; also, browse (noun) is the tender shoots, twigs and leaves of trees and shrubs often used as food by cattle, deer, elk and other animals.

BUFFER ZONE/BUFFER STRIP. Area of land adjacent to a body of water which filters sediment from overland runoff and has a stabilizing influence on the bank or shoreline.

BULK DENSITY (SOIL). The mass of dry soil per unit of bulk volume.

CALCAREOUS SOIL. Soil containing sufficient free calcium carbonate or calcium magnesium carbonate to effervesce visibly when treated with cold hydrochloric acid.

CALF CROP. The number of calves weaned from a given number of cows bred, usually expressed in percentages.

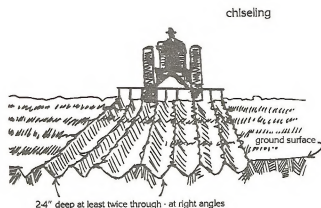
CANOPY COVER. The percentage of ground covered when a polygon drawn around the extremities of the undisturbed canopy of each plant is projected on the ground and all such projections on a given area are added together.

CHANNEL. An open conduit either naturally or artificially created which periodically or continuously contains moving water or forms a connecting link between two bodies of water.

CHANNEL STABILITY. A relative term describing erosion or movement of the channel walls or bottom due to water flow.

CHARACTERISTIC LANDSCAPE. The established landscape in an area, not necessarily a natural area. It could refer to a farming community, urban area or any other landscape which has an identifiable character.

CHISELING. Shallow tillage of the range to speed range improvement by increasing infiltration and reducing competition to desirable species from a dense stand of less desirable vegetation.



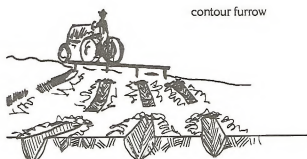
CLAYEY. A soil containing more than 35% clay. The textural classes are sandy clay, silty clay, clay and clay loam and silty clay loam.

CLAYPAN. A dense, compact layer in the subsoil having a much higher clay content than the overlying material from which it is separated by a sharply defined boundary.

CLIMAX. The highest ecological development of a plant community capable of perpetuation under the prevailing climatic and soil conditions.

COMPACTION. The process of packing firmly and closely together; the state of being so packed, e.g., mechanical compaction of soil by livestock or vehicular activity. Soil compaction results from particles being pressed together so that the volume of the soil is reduced. It is influenced by the physical properties of the soil, moisture content and the type and amount of compactive effort.

CONTRAST. The effect of a change in the form, line, color or texture of an existing landscape resulting from the addition of a manmade feature.



CONTOUR FURROW. A plowed strip to fit the contour of the land for the purpose of water retention.

COW-CALF OPERATION. A livestock operation in which a basic breeding herd of cows, heifers and bulls is maintained. The cows produce a calf crop each year and the operation keeps some heifer calves from each crop for breeding herd replacements. The operation sells the rest of the calf crop between the ages of 6-12 months along with old or non-productive cows and bulls.

CRITICAL WILDLIFE HABITAT. The area of land, water and airspace required for the normal needs and survival of an endangered species.

CRUCIAL WILDLIFE HABITAT. Parts of the habitat necessary to sustain a wildlife population at critical periods of its life cycle. This is often a limiting factor on the population, such as breeding habitat, winter habitat, etc.



Arrowheads

CULTURAL RESOURCES. A term that includes items of historical, archaeological or architectural significance which are fragile, limited and non-renewable portions of the human environment.

CULTURAL SITE. Any location that includes prehistoric and/or historic evidence of human use.

DEFERMENT. The withholding of livestock grazing until a certain stage of plant growth is reached.

DEFERRED GRAZING. Discontinuance of livestock grazing on an area for a specified period of time during the growing season to promote plant reproduction, establishment of new plants or restoration of the vigor by old plants.

DEFERRED ROTATION GRAZING. Discontinuance of livestock grazing on various parts of a range in succeeding years, allowing each part to rest successively during the growing season. This permits seed production, establishment of new seedlings or restoration of plant vigor. Two, but more commonly three or more, separate pastures are required. Control is usually ensured by fencing but may be accomplished by herding on sheep ranges.

DEPRECIATION. As used in this EIS, depreciation is the annual expense incurred in writing off costs of depreciable assets over their useful life.

DETENTION DAM. A dam constructed for the temporary storage of flood flows where the release opening is of fixed capacity and is not manually operated.

DIET OVERLAP. The presence of the same forage plant in the diet of several herbivores.

DIRECT INCOME. Income coming from a specific source.

DISTRIBUTION. The uniformity of livestock grazing over a range area. Distribution is affected by the availability of water, topography and type and palatability of vegetation as well as other factors.

DRAINAGE (INTERNAL SOIL). The property of a soil that permits the downward flow of excess water. Drainage is reflected in the number of times and in the length of time water stays in the soil. It is influ-

enced by the physical characteristics of the soil profile, the underlying layers and the depth of the water table.

DRAINAGE CLASSES (OF SOILS).

"Very Poorly Drained." Water is removed from the soil so slowly that free water remains at or near the surface during most of the growing season. Soils of this drainage class occupy level or depressed sites and are frequently ponded.

"Poorly Drained." Water is removed from the soil so slowly that the soil remains wet and the water table remains near the surface during a large part of the year.

"Somewhat Poorly Drained." Water is removed from the soil slowly enough to keep the soil wet for significant periods during the growing season.

"Moderately Well-Drained." Water is removed from the soil somewhat slowly during some periods. The soil is wet for a small part of the growing season.

"Well-Drained." Water is removed from the soil readily but not rapidly. Water is available for plant growth through most of the growing season and wetness does not inhibit growth of roots.

"Somewhat Excessively Drained." Water is removed from the soil rapidly. Soils may be shallow or sandy and rapidly pervious. Some are so steep that much of the water they receive is lost in runoff.

"Excessively Drained." Water is removed from the soil very rapidly. These soils are commonly coarse textured, rocky, shallow or steep.

ECOLOGICAL RANGE CONDITION CLASSES. Four classes used to express the degree to which the composition of the present plant community reflects that of climax. They are:

"Range Condition Class"	Percentage of Present Plant Community That is Climax for the Range Site	
Excellent	76-100	
Good		51-75
Fair		26-50
Poor		0-25

"High-Good Condition" 65%-75% of climax. A condition score of 65-75.

"Low-Good Condition" 51%-64% of climax. A condition score of 51-64.

ECOSYSTEM. An ecological community together with its physical environment. Its functioning involves the circulation of matter and energy between organisms and their environment.

EDGE EFFECT. This term refers to the fact that wildlife populations are generally highest in the areas where a diversity of habitats are available in a relatively small area, i.e. where habitats "edge" into one another.

ELIMINATION OF GRAZING. Relinquishment or cancellation of livestock grazing on public lands currently being grazed by livestock.

ENDANGERED OR THREATENED SPECIES. Determined for plants and animals by one or a combination of the following factors:

1. The present or threatened destruction, modification or curtailment of a species habitat or range.
2. Over-utilization of a species for commercial, sporting, scientific or educational purposes.
3. Disease or predation of the species.
4. The inadequacy of existing regulatory mechanisms.
5. Other natural or human caused factors affecting a species' continued existence.

ENVIRONMENTAL IMPACT STATEMENT (EIS). A written analysis of the impacts on the environment of a proposed project (e.g., a grazing program).

EPHEMERAL STREAM. A stream that flows only after rains or during snowmelt.

EQUITY CAPITAL INVESTMENT. The net value of a ranch property obtained by subtracting from its total value the amount owed on it.

EROSION. The wearing away of the land surface by running water, wind, ice or other geological agents.

EROSION CONDITION CLASSES. Expression of current erosion activity by use of the following ratings (soil surface factor): stable, 0-20; slight, 21-40; moderate, 41-60; critical, 61-80; severe, 81-100.

EROSION SUSCEPTIBILITY. The susceptibility of a soil to erosion when no cover is present. The rate of soil displacement depends on the physical properties of the soil, rainfall intensity and slope gradient.

EXPOSURE. Direction of a slope in respect to points of the compass.

FECAL COLIFORM. Bacteria that are present in the intestine and feces of warm blooded animals. Their presence in water indicates fecal contamination.

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 (FLPMA). Public Law 94-579, October 21, 1976, often referred to as the BLM's "Organic Act," which provides the majority of the BLM's legislated authority, direction, policy and basic management guidance.

FISHERMAN DAY. One person engaged in fishing during any part of one day.

FLOODPLAIN. The relatively flat area or lowlands adjoining a body of standing or flowing water which has been or might be covered by floodwater.

FORB. A broadleafed herb that is not grass, sedge or rush.

cudweed sagewort



FRIABLE. A soil with a loose surface that is easily crumbled or pulverized.

GEOMORPHIC. Pertaining to the form of the earth or its surface features.

GEOMORPHIC SOIL SUBGROUP. A group of soils having a unique kind and degree of limitation for alternative land use and treatment based on parent material, soil quality and landscape features.

GLACIAL TILL. Unstratified glacial drift deposited directly by the ice consisting of clay, silt, sand, gravel and boulders intermingled in any proportion.

GRANDFATHERED ACTIVITY. For wilderness purposes, any land surface disturbance or alteration that had occurred within a Wilderness Study Area prior to the passage of FLPMA (October 21, 1976).

GRAZING DISTRICT. Established by the Taylor Grazing Act, grazing districts are administrative subdivisions of the rangelands under jurisdiction of the BLM.

GRAZING SYSTEM. The manipulation of livestock grazing to accomplish a desired result.

GROUND COVER. Vegetation, mulch, litter, rocks, etc.

GROUNDWATER. Water contained in pore spaces of consolidated and unconsolidated subsurface material.

GULLYING. The erosion process whereby water accumulates in narrow channels and, over short periods, removes the soil from this narrow area to considerable depths, ranging from 0.5 meter (1.6 feet) to as much as 25 to 30 meters (83 to 100 feet).

HABITAT. A specific set of physical conditions that surround a species, group of species or a large community. In wildlife management, the major constituents of habitat are considered to be food, water, cover and living space.

HUNTER DAY. One person hunting during any part of one day.



HYDROLOGIC SOIL GROUP. A class of soils that have similar general infiltration and water movement ability through the soil profile and bedrock. Hydrologic groups are used to estimate runoff after rainfall. Soil properties influencing infiltration rates and runoff are depth to a water table, water intake rate and permeability and depth to layers of slowly permeable soil.

"Group A." Soils that have high infiltration rates when thoroughly wetted. This group consists chiefly of deep, well-drained to excessively well drained sand and/or gravel. Group A soils have a high rate of water transmission so they have a low runoff potential.

"Group B." Soils that have moderate infiltration rates when thoroughly wetted. This group consists of moderately deep to deep, moderately well drained to well drained soils with moderately fine to moderately coarse textures. Group B soils have a moderate rate of water transmission.

"Group C." Soils that have slow infiltration rates when thoroughly wetted. This group consists chiefly of: (1) soils with a layer that impedes the downward movement of water, or (2) soils with moderately fine to fine texture and slow infiltration rate. Group C soils have a slow rate of water transmission.

"Group D." Soils that have a very slow infiltration rates when thoroughly wetted. This group consists chiefly of: (1) clay soils with high swelling potential, (2) soils with a high permanent water table, (3) soils with claypan or clay layer at or near the surface, and (4) shallow soils over nearly impervious materials. Group D soils have a very slow rate of water transmission.

HYDROLOGY. The science dealing with the behavior of water as it occurs in the atmosphere, on the surface of the ground and underground.

IGNEOUS ROCKS. Rocks formed by solidification of molten earth materials. Intrusive igneous rocks are those solidified beneath the surface of the earth; extrusive igneous rocks emerged at the surface as molten material before solidifying (e.g. lava).

INDIRECT BUSINESS ACTIVITY. Total income produced in other economic sectors (such as in retail trade) by the receipt of income in a different sector (such as in the livestock industry).

INDUSTRY INCOME MULTIPLIER. An indicator of the income stimulated from the regional economy by an economic sector (e.g. government, agriculture) above and beyond the initial income produced by that sector.

INFILTRATION. The penetration of water into the soil surface through pores of the soil. The rate and amount of infiltration is limited by the size and abundance of pores, organic matter content and the water absorption capacity of the soil.

INFILTRATION CAPACITY. The maximum rate at which the soil, when in a given condition, can absorb falling rain or melting snow.

INSTANT STUDY AREA. One of the primitive or natural areas formally identified by the BLM prior to November 1, 1975.

INTERIM MANAGEMENT POLICY AND GUIDELINES FOR LANDS UNDER WILDERNESS REVIEW (IMP). A BLM document, dated December 12, 1979, which defines the policy for management of Wilderness Study Areas until a final determination on Wilderness designation is made by Congress.

INTERMITTENT STREAM. A stream which flows most of the time but occasionally is dry or reduced to pool stage.

INTERSEEDING. The practice of seeding native or introduced plant species into native range in combination with various mechanical treatments. Interseeding differs from range seeding in that only part of the native vegetation is removed to provide a seed bed for the seeded species.

KEY SPECIES. Major forage species on which range management should be based.

LANDSCAPE. All natural features such as fields, hills, forests, etc., which distinguish one part of the earth's surface from another part.

LAND TREATMENT. All methods of artificial range improvement and soil stabilization such as reseedling, brush control (chemical and mechanical), pitting, furrowing, waterspreading, etc.

LIMNOLOGY. The study of lakes and reservoirs.

LIVESTOCK OPERATION. The management of a ranch or farm so that a significant portion of the income is derived from the continuing production of livestock.

LOAMY. Soil that is intermediate in texture and properties between sandy and clayey soils. Textural classes are sandy loam, fine sandy loam, very fine sandy loam, loam, silt loam, silt, sandy clay loam, and silty clay loam and clay loam with less than 35 percent.

LOAMY SKELETAL. A soil with 35 percent or more by volume of rock fragments more than two millimeters in size with the fine-earth fraction defined as for loamy.

MANAGEMENT FRAMEWORK PLAN (MFP). A planning decision document that establishes, for a given planning area, land use allocations, coordination guidelines for multiple use, and management objectives to be achieved for each class of land use or protection. It is the BLM's land use plan. An MFP is prepared in three steps: (1) resource recommendations, (2) impact analysis and alternative development, and (3) decision making.

MECHANICAL TREATMENTS. Treatment by mechanical means of an area of range including contour furrowing, pitting, plowing and seeding, chiseling, scalping, water spreaders, etc. to accomplish desired objectives.

MITIGATION MEASURES. Methods or procedures committed to by BLM for the purpose of reducing or lessening the impacts of an action.

MICROCLIMATE. Climatic conditions characteristic of a small area. Microclimates are influenced by local geography and vegetation, and may be significantly different from regional climate in temperature, wind, length of growing season or precipitation patterns.

MULTIPLE USE. Balanced management of the various surface and subsurface resources, without permanent impairment of the productivity of the land, that will best meet present and future needs.

NET RANCH INCOME. The personal income available to the operator and his family for their labor and management and the return to their equity capital investment. Net ranch income is figured as the gross cash receipts of the ranch minus cash operating expenses and depreciation.

NONUSE. Available grazing capacity in AUMs which is not permitted during a given time period.

NUTRIENT LOADING. A weight/time measure used to express the amount of elements or compounds in water, such as carbon, oxygen, nitrogen and phos-

phorus, which are essential as raw materials for organism growth.

OFF-ROAD VEHICLE (ORV). Any motorized track or wheeled vehicle designed for cross-country travel over any type of natural terrain.

OPPORTUNITY COST OF CAPITAL. The most favorable economic return that capital could accrue if it were invested in something other than the ranch operation.

"PAPER CHANGE" IN PERMIT VALUE. The change in permit value caused by an increase or decrease in the authorized use of BLM AUMs with no real increase or decrease in the actual number of AUMs being grazed by livestock.

PARENT MATERIAL. The unconsolidated and more or less chemically weathered mineral or organic matter from which the surface layers of soils are developed by natural processes.

PEAK DISCHARGE. The highest stage or channel flow attained by a flood, usually expressed as the volume of water in cubic feet passing a given point in a one second time period, hence, cubic feet/second.

PEDESTALING. A phenomenon of erosion where plants or rocks are left standing on pedestals of soil. Pedestals are formed because a rock or plant has protected the soil underneath from wind and water erosion.

PERCENT OPTIMUM COVER. That percent of bank stabilizing cover consisting of vegetation, rocks, logs, etc.

PERCENTAGE OF USE. Grazing use of current vegetation growth, usually expressed as a percentage of weight removed.

PERENNIAL (PERMANENT) STREAM. A stream which flows nine or more months out of a year.

PERMEABILITY. The ease with which gases, liquids or plant roots pass through a layer of soil. Accepted as a measure of this property is the rate at which soil transmits water while saturated, and may imply how well water passes through the least permeable soil layer.

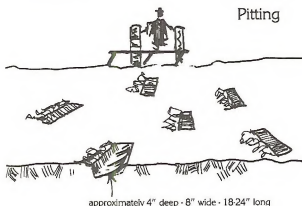
pH. The degree of acidity or alkalinity of a soil.

PERMIT (GRAZING). An authorization that permits the grazing of a specified number and kind of livestock on a designated area of BLM lands for a period of time, usually not more than one year.

PERMIT VALUE. The market value of a BLM grazing permit which is often included in the overall market value of the ranch.

PITTING. Making shallow pits or basins of suitable capacity and distribution on range to speed range

improvement. Pitting retains water from rainfall and snowmelt and reduces competition to desirable species from a dense stand of less desirable vegetation.



approximately 4" deep - 8" wide - 18-24" long

PLANNING AREA ANALYSIS (PAA). The PAA analyzes present and future public demand for lands, renewable and non-renewable resources. Based on data in the URA, the socio-economic profile and other information from the region, the PAA shows the significance of the land uses within a planning area to users and operators, to the community and to the region.

PLANT SUCCESSION. The process of vegetative development whereby an area becomes successively occupied by different plant communities of higher ecological orders.

PROPER USE. The degree and time of use of the current year's plant growth which, if continued, will either maintain or improve the range condition consistent with conservation of other natural resources.

PROPER USE FACTOR. The degree of use a kind of grazing animal will make of a particular plant when the range is properly grazed.

PUBLIC LANDS. Any land and interest in land (outside of Alaska) owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management.

PUBLIC PARTICIPATION. Part of BLM's planning system that provides the opportunity for citizens as individuals or groups to express local, regional, and national perspectives and concerns in the rule making, decision making, inventory and planning processes for public lands. This includes public meetings, hearings, or advisory boards or panels that may review resource management proposals and offer suggestions or criticisms for the various alternatives considered.

RANCH DEPENDENCY. As used in this EIS, the amount of BLM grazing divided by the total seven and one-half months grazing requirements of a ranch operation.

RANGE CONDITION. The present state of vegetation of a range site in relation to the climax plant community of that site. It is an expression of the relative degree to which the kinds, proportions and amounts of plants in a plant community resemble that of the climax plant community for that site. Range condition is basically an ecological rating of the plant community. Air-dry weight is the unit of measure used in comparing the composition and production of the present plant community with that of the climax community.

RANGE DEVELOPMENT. A structure, excavation, treatment or development to rehabilitate, protect or improve public lands to advance range betterment. "Range Development" is synonymous with "Range Improvement."

RANGE FACILITIES. Any structure or excavation such as water sources, shade sources, oilers, etc. designed to facilitate range management.

oiler



RANGE IMPROVEMENT. The same as "Range Development."

RANGE SEEDING. The process of establishing vegetation by mechanical dissemination of seed.

RANGE SITE. A distinctive kind of rangeland that differs from other kinds of range land in its ability to produce a characteristic natural plant community. A range site is the product of all the environmental factors responsible for its development. It is capable of supporting a native plant community typified by an association of species that differs from that of other range sites in the kind or proportion of species or in total production.

RANGE TREND. The direction of change in range condition and soil.

RECREATION INFORMATION SYSTEM (RIS). A BLM program to inventory, map and rate the quality of recreational activities available in a particular planning area.

RECREATIONAL OPPORTUNITY. Those outdoor recreation activities which offer satisfaction in a particular physical, social and management setting. In the Prairie Potholes EIS area, these activities are primarily hunting, fishing, wildlife viewing, picnicking and, in some areas, boating and camping.

RECREATIONAL QUALITY. For purposes of this EIS, a numerical rating for each recreational activity as determined by rating criteria unique to that activity. See "Recreation Information System"

REPRESENTATIVE RANCH BUDGET. A schedule of average costs, receipts and income for a typical ranch of a given size.

RESIDUAL GROUND COVER. That portion of the total vegetative ground cover that remains after the livestock grazing season.

REST ROTATION GRAZING. An intensive system of management where grazing is deferred on various parts of the range during succeeding years, allowing the deferred part complete rest for one year. Two or more units are required. Control by fencing is usually necessary on cattle range but may be obtained by herding on sheep ranges.

RILL. A small ephemeral water course several inches deep.

RIPARIAN AREA. A specialized form of wetland with characteristic vegetation restricted to areas along, adjacent to or contiguous with rivers and streams; also, periodically, flooded lake and reservoir shore areas, as well as lakes with stable water levels.

RUNOFF. The water that flows on the land surface from an area in response to rainfall or snowmelt. As used in this EIS, runoff from an area becomes streamflow when it reaches a channel.

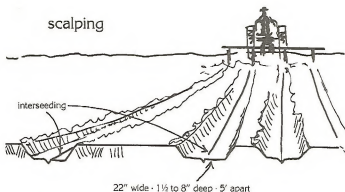
SALINE SEEP. Areas of recently developed salinity in soils that are non-irrigated but are wet some or all of the time and often have white salt crusts. Grass production on saline seeps is reduced or eliminated.

SALINE SOIL. A non-sodic soil containing sufficient soluble salt to impair its productivity. The electric conductivity of the saturation extract is more than two microhms per centimeter at 25°C.

SALINITY. A measure of the mineral substances dissolved in water.

SANDY. A soil containing a large amount of sand. Textural classes are sands and loamy sands.

SCALPING. Removing 10 to 25 inch wide strips of native vegetation and leaving undisturbed strips between. This mechanical treatment speeds range improvement by retaining rain, water and snowmelt and by reducing competition to desirable species from a dense stand of less desirable vegetation.



SCOPING (PUBLIC). See "Public Participation."

SEASON OF USE. The time of livestock grazing on a range area based on type of vegetation or stage of vegetative growth.

SEASONAL (SEASON LONG) GRAZING. Grazing use throughout a specific season.

SEDIMENT. Soil, rock particles and organic or other debris carried from one place to another by wind, water or gravity.

SEDIMENTATION. The action or process of deposition of material borne by water, wind or glacier.

SEDIMENTARY ROCK. A rock formed from materials deposited from suspension or precipitated from solution and usually being more or less consolidated. The principal sedimentary rocks are sandstone, shales and limestones.

SEDIMENT YIELD. The total amount of sediment given up by a watershed over a specified time period, usually a year. Ordinarily it is expressed as tons, acre feet or cubic yards of sediment per unit of drainage area per year.

SHEET EROSION. The detachment of soil material from the land surface by raindrop impact and its subsequent removal by prechannel or overland flow.

SHRUB. A low woody plant, usually with several stems, that may provide food and/or cover for animals.

SNOW HARVESTING. Methods used to increase the normal size of a snow drift in order to increase snow melt.



SODIC SOIL. A soil containing sufficient exchangeable sodium to interfere with the growth of most crop plants. A soil in which the sodium absorption ratio of the saturation extract is 15 or more.

SOIL. The unconsolidated mineral material on the immediate surface of the earth that serves as a natural medium for the growth of land plants.

SOIL ASSOCIATION. A mapping unit used on general soil maps in which two or more defined series occurring together in a characteristic pattern are combined. This could be because the scale of the map or the purpose for which it is being made does not require delineation of the individual series.

SOIL LOSS. The detachment of material from the land surface by raindrop impact and its subsequent removal by prechannel or overland flow. Synonymous with "Sheet Erosion."

SOIL MAP. A map showing the distribution of soil series or other soil mapping units in relation to the prominent physical and cultural features of the earth's surface.

SOIL MOISTURE. Water held in the root zone by capillary action. Part of the soil moisture is available to plants, part is held too tightly by capillary or molecular forces to be removed by plants.

SOIL SERIES. The basic unit of soil classification, being a subdivision of a family and consisting of soils which are essentially alike in all major profile characteristics except in the texture of the "A" horizon (or surface layer).

SOIL SURFACE FACTOR (SSF). An expression of current erosion activity. Seven categories of surface features are considered in the examination of the area with both wind and water being considered for each category. The categories are: soil movement, surface litter, surface rock, pedestaling, rills, flow patterns and gullies. Numerical values are assigned to each category, and these are totaled to determine the SSF. This value determines the erosion condition class of the area. See also "Erosion Condition Classes."

SOIL TEXTURAL CLASSES. See the Appendix.

SPECIES OF SPECIAL INTEREST OR CONCERN. Species not yet listed as "endangered or threatened" but whose status is being reviewed because of their widely dispersed populations or their restricted ranges. A species whose population is particularly sensitive to external disturbance.

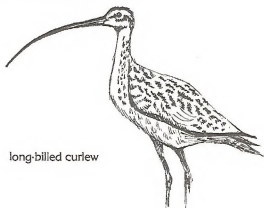
STREAMBANK (and CHANNEL) EROSION. This is the removal and transport of material by concentrated flows.

STREAM COURSE. See "Channel".

SURFACE SOIL OR SURFACE LAYER. The uppermost part of the soil, ordinarily moved in tillage, or its equivalent in uncultivated soils and ranging in thickness from 4 to 8 inches. Frequently designated as the "Plow layer", the Ap layer or the Ap horizon.

SUSTAINED YIELD. The achievement and maintenance of a high level annual or periodic yield of the various renewable resources of public lands consistent with multiple use.

THREATENED SPECIES. A species that the Secretary of Interior has determined to be likely to become endangered within the foreseeable future throughout all or most of its range. See also "Endangered or Threatened Species."



long-billed curlew

TOPOGRAPHIC COVER. The cover created in mechanical treatments by soil disturbance; that is, the furrows, irregular placed sod and soil clumps.

TOPOGRAPHY. The exact physical features and configuration of a place or region; the detailed and accurate description of the landforms of a place or region.

TOTAL DISSOLVED SOLIDS. The dry weight of dissolved material, organic and inorganic, contained in water.

TRESPASS. The grazing of livestock on public lands without proper authority, resulting either from a willful or negligent act.

TURBIDITY. An interference to the passage of light through water due to insoluble particles of soil, organics, micro-organisms and other materials.

UNDERLYING MATERIAL. The weathered parent material (See "Parent Material").

UNIT RESOURCE ANALYSIS (URA). A comprehensive display of physical resource data and an analysis of the current use, production, condition and trend of the resources and the potentials and opportunities within a planning unit, including a profile of ecological values.

VEGETATION (GROUND) COVER. The percent of land surface covered by all living vegetation (and remnant vegetation yet to decompose) within 20 feet of the ground.

VESICULAR. Soil pores are spherical or elliptical in shape. Pores of this type are enclosed by unaggregated soil.

VISUAL RESOURCE(S). The land, water, vegetation and animals that comprise the scenery of an area.

VISUAL RESOURCE MANAGEMENT (VRM). The planning, design and implementation of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.

VISUAL RESOURCE MANAGEMENT CLASS. Classification of landscapes according to the kind and degree of visual change that is acceptable within that characteristic landscape.

WATER INFLUENCE ZONE. That land within and adjacent to a stream channel which is within the perimeter of the maximum probable flood.

WATER QUALITY. The chemical, physical and biological characteristics of water with respect to its suitability for a particular use.

WATERSHED. All lands which are enclosed by a continuous hydrologic drainage divide and lie upslope from a specified point on a stream.

WATERSHED COVER. The material (vegetation, litter, rock) covering the soil and providing protection from, or resistance to, the impact of raindrops and the energy of overland flow, and expressed in percent of the area covered.

WATER SPREADER. A terrace, dike or other structure intended to distribute surface water runoff and increase the area of infiltration.

WATER YIELD. The quantity of water derived from a unit area of watershed.



windmill



whooping crane

WELL-BEING. Condition of human happiness and health, measured objectively by socioeconomic indicators or subjectively with individual perceptions.

WETLANDS. Permanently wet or intermittently flooded areas where the water table (fresh, saline or brackish) is at, near or above the soil surface for extended intervals, where hydric wet soil conditions are normally exhibited and where water depths generally do not exceed two meters.

WILDERNESS STUDY AREA. A roadless area determined to have wilderness characteristics. Study areas will be subjected to interdisciplinary analysis and public comment to determine wilderness suitability. Suitable areas will be recommended to the President and Congress for wilderness designation.

WOLF PLANT. A plant that, though the species is considered palatable, is not grazed by livestock. The term "wolfy" is often used to describe this condition which is common on underutilized crested wheatgrass seedings.

REFERENCES

- Abt Associates, Inc. 1979. *Socio-economic profile of the Prairie Potholes study area*. Denver, Colorado.
- . 1980. *Regional analysis of the Prairie Potholes study area*. Denver, Colorado.
- . 1980a. *An analysis of attitudes regarding vegetation allocation and quality of life in the Prairie Potholes area of Montana*. Denver, Colorado.
- Agricultural Stabilization and Conservation Service. 1980. Personal communication to collect crop data in these Montana counties: Valley, Phillips, Blaine, Hill and Chouteau. Soil Conservation Service (USDA), Chinook, Montana.
- Allen, E.O. 1965. Food and range use habits of white-tailed deer on Missouri River bottomlands in North Central Montana. *Journal of Wildlife Management* 32 (1): 130-41.
- Ames, C.R. 1977. Wildlife conflicts in riparian management: grazing in importance to preservation and management of riparian habitat. A symposium. U.S. Forest Service (USDA) General Technical Report RM-43, pp. 49-51. Fort Collins, Colorado.
- Behnke, R.J. and Ralleggh, R.F. 1978. Grazing and the riparian zone: impact and management perspectives. In *Strategies for Protection and Management of Floodplains, Wetlands and other Riparian Ecosystems Symposium*. U.S. Forest Service (USDA) General Technical Report WO-12, pp. 263-67, Fort Collins, Colorado.
- Bloom, D. and Botz, M.K. 1974. *Water quality inventory and management plan, Milk River basin, Montana*. Montana Water Quality Bureau (Montana Dept. of Health and Environmental Sciences). Helena, Montana.
- Bohls, L.L. and Miller, M.R. 1976. Saline seep in Montana. In *Salty Soils and Saline Seep*. Montana State University Cooperative Extension Service Circular 1166, Bozeman, Montana.
- Boldt, C.E., Uresk, D.S. and Severson, K.E. 1978. Riparian woodlands in jeopardy on the northern high plains. In *Strategies for Protection and Management of Floodplains, Wetlands and Other Riparian Ecosystems Symposium*. U.S. Forest Service (USDA) General Technical Report WO-12, pp. 268-70, Fort Collins, Colorado.
- Botz, M.K. 1976. Salinity in hydrological systems in Montana. In *Salty Soils and Saline Seep*. Montana State University Cooperative Extension Service Circular 1166, Bozeman, Montana.
- Branson, F.A., Miller, R.F. and Queen, I.S. 1962. Effects of contour furrowing, grazing intensities and soils on infiltration rates, soil moisture and vegetation near Fort Peck, Montana. *Journal of Range Management* 15:151-58.
- Brown, P.L. and Ferguson, H. 1976. Crop and soil management for possible control of saline seeps in Montana. In *Salty Soils and Saline Seep*. Montana State University Cooperative Extension Service Circular 1166, Bozeman, Montana.
- Buck, P. 1947. The biology of antelope in Montana. Unpublished M.S. thesis, Montana State College, Bozeman, Montana.
- Campbell, A.G. 1936. *Climatic fluctuations: the western range*. United States Senate. Document 199:135-50.
- Campbell, R.B. 1970. Pronghorn, sheep and cattle range relationships in Carter County, Montana. Unpublished M.S. thesis, Montana State University, Bozeman, Montana.
- Campbell, T.M. and Clark, T.W. 1980. Colony characteristics and vertebrate associates of white-tailed and black-tailed prairie dogs in Wyoming. *American Midland Naturalist*, July, 1980: 153-155.
- Childress, D. 1980. Personal communication. Montana Department of Fish, Wildlife and Parks.
- Cole, G.F. 1955. *Range use and food habits of the pronghorn antelope in Central Montana with special reference to alfalfa*. Montana State College Agricultural Experiment Station Technical Bulletin 516, Bozeman, Montana.
- Cook, C.W. 1966. *The role of carbohydrate reserves in managing range plants*. Utah State University Agricultural Experiment Station Mimeograph 499, Logan, Utah.
- Colorado Division of Game, Fish and Parks. 1970. *Survey of sportsmen expenditures for hunting and fishing in Colorado, 1968*. Technical Publication 24, Denver, Colorado.

- Cornelius, J. 1977. *Two-hundred and fifty head cow calf ranch in Blaine County*. Montana State University Cooperative Extension Service Bulletin 1173, Bozeman, Montana.
- Dyksterhuis, E.J. 1951. Use of ecology on rangeland. *Journal of Range Management* 4(5):65-75.
- Egan, J.L. 1971. Mule deer. *Game Management in Montana*. Montana Fish and Game Department, Helena, Montana.
- Eng, R.L. and Schladweiler, P. 1968. *Winter distribution and habitat use by sage grouse*. Montana Department of Fish and Game, P-W-105-R-2, B-1, Helena, Montana.
- . 1972. Sage grouse winter movements and habitat use in Central Montana. *Journal of Wildlife Management* 36(1):141-46.
- Ferguson, H. 1976. Saline seep. In *Salty Soils and Saline Seep*. Montana State University Cooperative Extension Service Circular 1166, Bozeman, Montana.
- Gifford, G.F. 1975. Beneficial and detrimental effects of range improvement practices on runoff and erosion. In *Watershed Management*. A symposium. American Society of Civil Engineers, Logan, Utah: pp. 216-48.
- Gill, R.B. 1965. Distribution and abundance of a population of sage grouse in North Park, Colorado. Unpublished M.S. thesis, Colorado State University, Fort Collins, Colorado.
- Gjersing, F.M. 1971. A study of waterfowl production on two rest rotation grazing units in North-central Montana. Unpublished M.S. thesis, Montana State University, Bozeman, Montana.
- Hesla, C., Robbins, H., Gelhaus, J.W. and Roach M.D. 1979. *Annual air quality data summary for Montana*, 1978. Montana Air Quality Bureau (Montana Department of Health and Environmental Sciences), Helena, Montana.
- Hiatt, R.W. 1947. *The relation of pheasants to agriculture in the Yellowstone and Big Horn River valleys of Montana*. Montana Department of Fish and Game, Helena, Montana.
- Holechek, J. 1980. Livestock grazing impacts on rangeland ecosystems. *Journal of Soil and Water Conservation* 35(4):162-64.
- Hormay, A.L. 1970. *Principles of rest rotation grazing and multiple use land management*. U.S. Forest Service (USDA) Training Text 4 (2200), Washington, D.C.
- Houlton, H.A.R. 1975. *Some evaluations and results of range interseeding*. Montana State University Agricultural Experiment Station, Xerox, Bozeman, Montana.
- Houston, W.R. and Woodward, R.R. 1966. *Effects of stocking rates on range vegetation and beef cattle production in the northern great plains*. Agricultural Research Service (USDA) Technical Bulletin 1357, Washington, D.C.
- Janson, R.F. and Greene, R. 1971. Ring-necked pheasant. In *Game Management in Montana*. Montana Department of Fish and Game, Helena, Montana.
- Johnson, A. and Smoliak, S. 1979. *Grazing systems for Alberta ranges*. Alberta Department of Agriculture Publication Number 134/14. Calgary, Alberta, Canada.
- Johnson, M. 1974. Some notes from the 1974 Census of Agriculture. In *Montana Business Quarterly*, Summer, 1977.
- Johnson, S.R., Gray, H.L. and Ponce, S.L. 1978. *Range cattle impacts on stream water quality in the Colorado Front Range*. U.S. Forest Service (USDA) Research Note RM-359, Fort Collins, Colorado.
- Kearl, W.G. 1973. Economics and management constraints for livestock production in arid shrublands. In *Proceedings of the Third Workshop of the United States—Australia Rangeland Panel*. Denver, Colorado.
- Kirsch, J.B. 1962. Range use, relationship to logging, and food habits of the elk in the Little Belt Mountains, Montana. Unpublished M.S. thesis, Montana State University, Bozeman, Montana.
- Klebinow, D.A. and Gray, G.M. 1968. Food habits of juvenile sage grouse. *Journal of Range Management* 21(2): 80-83.
- Knight, R.R. 1967. *Elk population trends, food habits and range relationships in the Sun River area*. Montana Department of Fish and Game, W-98-R-6 and 7, B-4, Helena, Montana.

- Korthmann, M.M., Mathis, G.W., Marian, P.T. and Waldrip, W.J. 1970. *Livestock production and economic returns from grazing treatments on the Texas experimental ranch*. Texas Agricultural Experiment Station Bulletin 1100, College Station, Texas.
- Kroll, James. 1976. Saline seep. In *Salty Soils and Saline Seep*. Montana State University Cooperative Extension Service Circular 1166, Bozeman, Montana.
- Lemke, R.W., Laird W., Tipton, M.J. and Lindvall, R.M. 1965. Glaciated area east of the Rocky Mountains. In *The Quaternary of the United States*, ed. H.E. Wight, Jr. and D.G. Fry. Princeton: Princeton University Press.
- Lodge, R.W. and Campbell, J.B. 1965. *The point method and forage yield tables for determining carrying capacity*. Saskatchewan Animal and Pasture Sciences Experimental Farm. Swift Current, Saskatchewan, Canada.
- Lodge, R.W., Smoliak, S. and Johnson, A. 1972. *Managing crested wheatgrass pastures*. Agriculture Canada Publication 1473, Ottawa, Ontario, Canada.
- Lovaas, A.L. 1957. Mule deer food habits and range use in the Little Belt Mountains, Montana. *Journal of Wildlife Management* 22(3):275-83.
- Marshall, W.H. and Jensen, M.S. 1937. Winter and spring studies of the sharp-tailed grouse in Utah. *Journal of Wildlife Management* 1:87-99.
- Martin, A.C. Zim, H.S. and Nelson, A.C. 1951. *American wildlife and plants: a guide to wildlife food habits*. New York: McGraw-Hill.
- Martin, N.S. 1970. Sagebrush control related to habitat and sage grouse occurrence. *Journal of Wildlife Management* 34(2):313-20.
- Martinka, C.F. 1965. Population status, social habits, movements and habitat relationships of the summer resident elk herd of Jackson Hole, Wyoming. Unpublished M.S. thesis, Montana State College, Bozeman, Montana.
- Mattise, S.N. 1978. Effects of grazing systems on sharp-tailed grouse habitat. Unpublished M.S. thesis, South Dakota State University, Brookings, South Dakota.
- McCouney, R.J. 1976. *Public land grazing and ranch economics*. Agricultural Economics and Economics Department Staff Paper 76-10, Montana State University, Bozeman, Montana.
- McKean, J.R. 1979. *Input-output analysis for sportsman expenditures in Colorado*. Colorado Division of Game, Fish and Parks Technical Publication 1001, Denver, Colorado.
- Miller, R.F., McQueen, F.A., Bronson, L.M. and Buller, W. 1969. An evaluation of range floodwater spreaders. *Journal of Range Management* 22(4): 246-57.
- Morrison-Maierle, Inc. 1980. *Summary report: inventory of existing water quality and quantity—Phillips and Blaine Counties, Montana*. Farmington, New Mexico.
- Montana Board of Crime Control. 1979. *Crime in Montana, 1978*. Annual Report of the Criminal Justice Data Center of Montana, Helena, Montana.
- Montana Department of Fish and Game. 1960. *Economic survey: 1960*, Helena, Montana.
- . 1969. *Fish and wildlife resources in the Malta District*. Contract number 14-11-008-30-6, Helena, Montana.
- . 1974-79. *Region six survey and inventory of deer, elk, antelope and sheep*. Project Numbers W-130-R-7, 8, 9 and 10, Helena, Montana.
- . 1978. *Montana statewide comprehensive outdoor recreation plans (SCORP)*. Helena, Montana.
- . 1978a. *Design for tomorrow: 1977-1990*. Helena, Montana. Montana Department of Fish, Wildlife and Parks. 1980a. *Big game harvest surveys: 1973-79*. Helena, Montana.
- . 1980b. *Yearly summary of upland game bird surveys in region six*. Project Number W-130-R-9, Helena, Montana.
- Montana Department of Revenue. 1978. *Report of the State Department of Revenue: July 1, 1976 to June 30, 1978*. Helena, Montana.
- Montana Research and Information Systems Division. 1978. *Montana population projections, 1980-2000*. Montana Department of Community Affairs, Helena, Montana.

- National Analysis Division. *National survey of hunting, fishing and wildlife—associated recreation*. Boot, Allen and Hamilton, Inc.
- Neff, E.L. 1980. Snow trapping by contour furrowing in southeastern Montana. *Journal of Range Management* 33(3): 221-23.
- Neff, E.L. and Wright, J.R. 1977. Overwinter soil water recharge and herbage production as influenced by contour furrowing on eastern Montana rangelands. *Journal of Range Management* 30(3): 193-95.
- Nielson, L.S. 1978. The effects of rest rotation grazing on the distribution of sharp-tailed grouse. Unpublished M. S. thesis, Montana State University, Bozeman, Montana.
- North Dakota University Cooperative Extension Service. 1979. *Leafy spurge symposium (June 26-27, 1979)*. Agricultural Experimental Station. Bismark, North Dakota.
- Perry, Eugene S. 1931. *Groundwater in eastern and central Montana*. Montana Bureau of Mines and Geology Memoir Number 2, Butte, Montana.
- Peterson, J.G. 1969. The food habits and summer distribution of juvenile sage grouse in central Montana. *Journal of Wildlife Management* 34(1): 147-55.
- Pierson, R.K. 1955. Range water spreading as a range improvement practice. *Journal of Range Management* 8: 155-58.
- Platts, W.S. 1979. Livestock grazing and riparian/stream ecosystems: an overview. In *Proceedings of the Forum on Grazing and Riparian/Stream Ecosystems*. Denver, Colorado.
- Rauzi, F. and Hanson, C.L. 1966. Water intake and runoff as affected by intensity of grazing. *Journal of Range Management* 19(6): 351-56.
- Roberts, D.A. 1970. Antelope range use, food habits and behavior in relation to sagebrush eradication. Unpublished M. S. thesis, Montana State University, Bozeman, Montana.
- Ryerson, D. 1970. Clubmoss on Montana rangelands. Montana State University Agricultural Experiment Station Bulletin 645, Bozeman, Montana.
- . Taylor, J.E. and Houlton, H.A.R. 1974. *Mechanical range improvement methods in Montana*. Montana State University Agricultural Experiment Station Miscellaneous Publication, Bozeman, Montana.
- . Taylor, J.E. 1974. *Rangeland fertilization in Montana—a literature review*. Montana State University Agricultural Experiment Station, Bozeman, Montana.
- . Houlton, H.A.R. 1979a. Field day report, south Liberty County, Pugsley Rancher, Inc. Broadhurst Ranch, Montana. Montana State University Agricultural Experiment Station. Bozeman, Montana.
- . Houlton, H.A.R. 1979b. *Soil moisture studies addition to field day report, south Liberty County, Pugsley Rancher, Inc. Broadhurst Ranch, Montana*. Montana State University Agricultural Experiment Station. Bozeman, Montana.
- . Houlton, H.A.R. and Wambolt, C.L. 1980. *Range improvement tools*. Montana State University Agricultural Experiment Station. Bozeman, Montana.
- Saulmon, R.W. 1973. Snowdrift management can increase water—harvesting yields. *Journal of Soil and Water Conservation* 14: 118-21.
- Smeins, F.E. 1975. Effects of livestock grazing on runoff and erosion. In *Watershed Management*. A symposium. American Society of Civil Engineers, pp. 267-74. Logan, Utah.
- Smith A.G., Stoudt, J.H. and Gollop, J.B. 1964. Prairie potholes and marshes. In *Waterfowl Tomorrow*, ed. J.P. Linduska, U. S. Fish and Wildlife Service (USDI), Washington, D.C.
- Smith, A.H. and Martin, W.E. 1972. Socio-economic behavior of the cattle rancher with implications for rural community development in the west. *American Journal of Agricultural Economics* May, 1972.
- Smith, G.A. 1930. The Sun River elk herd. *Journal of Forestry* 28(5): 644-47.
- Smoliak, S. 1960. Effects of deferred rotation and continuous grazing on yearling steer gains and shortgrass vegetation of southeastern Alberta. *Journal of Range Management* 13(5): 239-43.
- Stevens, D.R. 1965. Range relationships of elk and livestock in the Crow Creek drainage, Elkhorn Mountains, Montana. *Journal of Wildlife Management* 30(2): 349-63.

- Stone, A.W. 1958. *A summary report of the groundwater situation in Montana*. Montana Bureau of Mines and Geology Information Circular Number 26, Butte, Montana.
- Stroh, J.R., McWilliams, J.L. and Thornberg, A.A. 1978. "Garrison" creeping foxtail. Soil Conservation Service (USDA), Washington, D.C.
- Trueblood, R. 1980. Personal communication about the projected numbers of big game in the area from the six alternatives of the Prairie Potholes EIS. Montana Department of Fish, Wildlife and Parks, Glasgow, Montana.
- Tueller, P.T. and Tower, J.D. 1979. Vegetation stagnation in three-phase big game exclosures. *Journal of Range Management* 32: 258-64.
- United States Agricultural Research Service. 1974. *Interagency frail lands study*. USDA Contract Number 14-11-008-2861. Washington, D.C.
- United States Bureau of the Census. 1977. *Census of Agriculture, 1974: Montana state and county data*. USDC. Washington, D.C.
- . 1978. County and city data book, 1977. USDC. Washington, D.C.
 - . 1979. Population estimates and projections. USDC Series P-25, Number 839. Washington, D.C.
 - . 1980a. Personal communication with the Denver region office about preliminary 1980 Montana census data. USDC. Denver, Colorado.
 - . 1980b. Personal communication about the 1979 Montana "Census of Agriculture". USDC. Washington, D.C.
- United States Bureau of Economic Analysis. 1980. *Earnings and personal income by major sources, 1974-1978*. USDC. Washington, D.C.
- United States Bureau of Land Management. 1975. *Social-economic profiles*. 2 vols. USDI. Billings, Montana.
- . 1978a. *Prairie potholes waterfowl and fisheries habitat management plan of north central Montana*. USDI. Billings, Montana.
 - . 1978b. *Upper Missouri wild and scenic river management plan*. USDI. Billings, Montana.
 - . 1978c. *Manual 8400: visual resource management*. USDI. Washington, D.C.
 - . 1978d. *Manual 8411: upland visual resource inventory and evaluation*. USDI. Washington, D.C.
 - . 1978e. Recreation inventory system (RIS). Unpublished manuscript, BLM (USDI) Havre, Phillips and Valley Resource Offices, Montana.
 - . 1979a. *Livestock grazing management and water quality protection (state of the art reference document)*. BLM (USDI) and U. S. Environmental Protection Agency. Washington, D.C.
 - . 1979b. *Interim management policy and guidelines for lands under wilderness review*. USDI. Washington, D.C.
 - . 1980a. Inventory report of sediment and water yields. Unpublished manuscript, BLM (USDI). Washington, D.C.
 - . 1980b. Unit resource analyses. BLM (USDI) Havre, Phillips and Valley Resource Area Offices, Montana.
- United States Bureau of Reclamation. 1972. *Report on resources of eastern Montana basins, Pick-Sloan Missouri basin program*. USDI, Washington, D.C.
- United States Code. 1964. Federal land policy and management act of 1976, as amended. 1976 Supplement (43 U.S.C. 1331 et seq.) 102(8), 103(c). Washington, D.C.
- United States Economic Statistics and Cooperative Service. 1979. *Farm real estate market development*. USDA. CD-84, Washington, D.C.
- United States Environmental Protection Agency. 1976. Quality for water. In Groundwater Survey of the Prairie Potholes EIS Area. Unpublished manuscript. Washington, D.C.
- United States Forest Service. 1977. *Regional industrial multiplier system: a guide for river basin analysis*. USDA, Washington, D.C.

- United States National Oceanic and Atmospheric Administration. 1971. *Climate of Montana, Climatology of the United States*. USDC. Number 60-24, Washington, D.C.
- . 1981. Personal communication about weather and winds in the Prairie Potholes EIS area. USDC. Great Falls, Montana.
- United States Resources Council. 1977. *Guidelines: regional multiples*. Washington, D.C.
- Vallentine, J.F. 1971. *Range development and improvements*. Provo, Utah: Brigham Young University Press.
- Verme, L.J. 1969. Reproductive patterns of white-tailed deer related to nutritional plane. *Journal of Wildlife Management* 33(4): 881-87.
- Wallestad, R.O. 1971. Summer movements and habitat use by sage grouse broods in central Montana. *Journal of Wildlife Management* 35(1): 129-36.
- . 1975. Male sage grouse responses to sagebrush treatment. *Journal of Wildlife Management* 39(3): 482-84.
- . Peterson, J.G. and Eng, R.L. 1975. Foods of adult sage grouse in central Montana. *Journal of Wildlife Management* 39(3): 628-30.
- . and Pyrah, D. 1974. Movement and nesting of sage grouse hens in central Montana. *Journal of Wildlife Management* 38(4): 630-33.
- . and Schladweiler, P. 1974. Breeding season movements and habitat selection of male sage grouse. *Journal of Wildlife Management* 38(4): 634-37.
- Wight, J.R. and Siddoway, F.H. 1972. Improving precipitation-use efficiency on rangeland by surface modification. *Journal of Soil and Water Conservation* 27(4): 170-74.
- . Neff, E. L. and Siddoway, F.H. 1975. *Snow management on eastern Montana rangelands*. Great Plains Agricultural Council Publication Number 73: pp. 138-42. Denver, Colorado.
- Wilkins, B. and Cole, G.F. 1958. *The pronghorn: its range and food habits in Central Montana with special reference to wheat*. Montana Department of Fish and Game Technical Bulletin Number 2, Helena, Montana.
- Willard, E.E. and Herman, L. 1977. *Influence of grazing by various systems on vegetation and soils in the Missouri River Breaks area, Montana*. Cooperative Report BLM (USDI) and the University of Montana, Missoula, Montana.
- Wilson, F.S., Thomas, O.O. and Jacobsen, N.A. 1972. *Beefing up your cattle profits through nutrition and management*. Montana State University Cooperative Extension Service Bulletin 339, Bozeman, Montana.
- Winegar, H.H. 1979. Camp creek channel fencing—plant, wildlife, soil and water response. *Rangeman's Journal* 14: 10-12.
- Yoe, C.A. 1977. Effects of rest-rotation grazing on the abundance and distribution of sharp-tailed grouse. Unpublished M.S. thesis, Montana State University, Bozeman, Montana.
- Zimmerman, E.A. 1960. *Preliminary report on the geology and ground-water resources of northern Blaine County, Montana*. Montana Bureau of Mines and Geology Bulletin 19, Butte, Montana.

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